

ENVIRONMENTAL ASSESSMENT
for
YOUNG STAND MAINTENANCE BRUSHING
AND
PRE-COMMERCIAL THINNING
WITH FUEL HAZARD REDUCTION

EA# OR-110-02-13

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
GRANTS PASS RESOURCE AREA

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EA COVER SHEET

RESOURCE AREA: *Grants Pass*

EA # OR-110-02-13

ACTION/TITLE: *Young Stand Maintenance Brushing and Pre-commercial Thinning with Fuel Hazard Reduction Work*

LOCATION: *Locations throughout the Grants Pass Resource Area*

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GRANTS PASS RESOURCE AREA ENVIRONMENTAL ASSESSMENT

Young Stand Maintenance Brushing and Pre-commercial Thinning with Fuel Hazard Reduction

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Chapter 1

Purpose of and Need for Action and Proposed Action

A. Introduction and Need for the Proposal

1. Introduction

The purpose of this environmental assessment (EA) is to assist in the decision-making process by assessing the environmental and human affects resulting from implementing the proposed project and/or alternatives. The EA will also assist in determining if an environmental impact statement (EIS) needs to be prepared or if a finding of no significant impact (FONSI) is appropriate.

This EA tiers to the following documents:

- (1) the Final EIS and Record of Decision dated June 1995 for the Medford District Resource Management Plan (RMP) dated October 1994;
- (2) the Final Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated February 1994;
- (3) the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and its Attachment A entitled the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (NFP) dated April 13, 1994; and
- (4) the Record of Decision and Standards and Guidelines for Amendments to the Survey and Manager, Protection Buffer, and other Mitigation Measures Standards and Guidelines dated January 2001.

2. Purpose of and Need for the Proposal

The Northwest Forest Plan (NFP) and the Medford District Resource Management Plan (RMP) directs active treatments of young stands for accelerated growth, controlling stand density, influencing species dominance, maintaining stand vigor, and placing stands on developmental paths so that desired stand characteristics result in the future. In addition, maintenance treatments are implemented to promote survival and establishment of conifers and other vegetation by reducing competition from undesired plant species.

These actions create slash with a consequent increase of the fire hazard. The purpose of the proposed fuels treatment is to reduce the fire and fuel hazard created by these various silvicultural young stand practices.

B. Land Allocation Category Objectives

This project includes work located within the Matrix, Late-Successional Reserve (LSR), Riparian

Reserves, and Adaptive Management Area (AMA's) land allocations. Land allocations were established by the Northwest Forest Plan and the Medford District Resource Management Plan (RMP). Management objectives pertinent to young stand management in each of the involved land allocations are summarized below.

1. Matrix

- Design practices to assure a high level of sustained timber productivity.
- Improve forest condition (health) through the use of density management and operations to reduce competition.
- Create stands with trees of varying age and size and an assortment of canopy configurations.
- Manage stands to decrease the risk of destruction by wildfire using various management practices, including hand piling.

2. Late-Successional Reserve (LSR)

- Implement practices beneficial to the creation of late-successional forest conditions.
- Implement practices that place or maintain stands on desired developmental pathways.
- Implement practices that are designed to restore forest condition (forest health).
- Implement practices that will reduce the risks of stand loss.
- Implement practices that will maintain long-term habitat viability.

3. Riparian Reserve

- Control stocking, reestablish and manage stands, to establish and manage desired non-conifer vegetation, and to acquire vegetation characteristics needed to attain objectives of the Aquatic Conservation Strategy (ACS).
- Implement forest health activities that will meet ACS objectives.
- Provide dispersal habitat for northern spotted owls.
- Provide habitat for terrestrial species associated with late-successional habitat.

4. Adaptive Management Area

- Implement practices which emphasize the development and testing of forest management practices that provide for a broad range of forest values, including late-successional forest and high quality riparian habitat.
- Implement practices which are designed to improve or maintain forest condition (health).

C. Project Location

The proposed project sites are located throughout the Grants Pass Resource Area. Table 6 (Appendix A) lists the individual units which have the potential for maintenance brushing, pre-commercial thinning, slashbuster, and subsequent fuel and hazard reduction treatment.

D. Scoping Issues Relevant to the Proposal

Several issues of potential concern were raised during the scoping phase of project planning. They are:

1. Fuel treatments and air quality concerns:
 - the requirements of the Oregon Smoke Management Plan (OSMP).
 - the proximity of the portions of the GPRA to the OSMP designated non-attainment areas of Grants Pass and Medford/Ashland.
2. The potential for escaped fires as a result of prescribed burning.
3. Potential impacts to Special Status, Survey and Manage, and T&E species.
4. Potential impacts to Riparian Reserves and water quality.

Chapter 2

Proposed Action and Alternatives

A. Alternative 1: No Action

In this EA document the "no-action" alternative is defined as not implementing the proposed action alternative. Defined this way, the no action alternative also serves as a baseline or reference point for evaluating the environmental effects of the action alternative. Inclusion of this alternative is done without regard whether or not it is consistent with the Medford District RMP.

The no action alternative is not a "static" alternative. Implicit is the continuation of the current ecological and social processes and trends.

B. Alternative 2: Proposed Action

1. Introduction

The proposed action alternative includes maintenance brushing and pre-commercial thinning of young stands. It also includes treating the resultant slash to reduce fuel levels and fire hazard where appropriate based on hazard and risk considerations. The amount of fuel hazard reduction work which would be accomplished is dependent on available funding. The proposed work is projected to occur between 2002 and 2004.

2. Maintenance Brushing

All units proposed for maintenance brushing are past timber harvest units and are identified in Table 5. Conifer heights of trees to be brushed around range from 2 to 15' tall. Maintenance brushing is prescribed in these stands in order to ensure survival and optimal growth of the preferred conifer species and selected hardwoods. Brushing would be done with chainsaws and/or hand tools.

a. Matrix, AMA, and LSR

Brush of all species and sizes would be cut, except for elderberry. Hardwoods (except for bigleaf maple, yew, myrtle or dogwood), less than 8" DBH would be cut. All tanoak less than 12" DBH would be cut or girdled. To ensure species diversity as well as stand differentiation, selected hardwoods would be retained, and excess vegetation (brush and excess hardwoods) would be cut. Hardwoods of any size or species, except for tanoak, would be reserved as needed to maintain an approximately 25' x 25' spacing. All cut trees would be lopped and bucked to <5' lengths.

b. Riparian Reserves

Maintenance brushing would be done within the riparian reserve portions of units with the exception of no treatment zones that would be maintained adjacent to the stream / spring / wet area as outlined in

Table 2 (Project Design Feature in section Chapter 3.)

3. Pre-commercial Thinning

Stands would be pre-commercially thinned so as to provide increased moisture, sunlight and nutrients to the selected conifer and hardwood leave trees. Seven pre-commercial thinning treatment prescriptions are proposed. Selection of the proposed prescription is based on the type, condition and location of the individual thinning unit and the desired future condition for the stand. Table 6 lists the proposed treatment units and proposed unit prescription. Some refinement of the proposed prescriptions could occur with additional field review. The basic prescriptions are as follows:

- (1) pre-commercial thinning (14' x 14' spacing) and hardwood spacing with maintenance brushing,
- (2) pre-commercial thinning and hardwood spacing with variable spacing for the conifers based on DBH (diameter breast height) with maintenance brushing.
- (3) pre-commercial thinning (16' x 16' spacing) and hardwood spacing without maintenance brushing,
- (4) pre-commercial thinning (16' x 16' spacing) and hardwood spacing with maintenance brushing,
- (5) pre-commercial thinning (18' x 18' spacing) and hardwood spacing without maintenance brushing,
- (6) pre-commercial thinning by crown spacing and hardwood spacing without maintenance brushing,
- (7) pre-commercial thinning (18' x 18' spacing) and hardwood spacing with maintenance brushing, and
- (8) precommercial thinning using a slashbuster (16' x 16' or 18' x 18' spacing of conifers and 25' x 25' spacing of hardwoods) with maintenance brushing.

As noted, prescriptions #1, # 2, #4, # 7 and #8 include the cutting of 100% of all brush species. The other three prescriptions do not include brush cutting.

Brushing, conifer and hardwood spacing would be done using chainsaws in each of the treatment prescriptions except for prescription #8 which would include thinning by the use of a slashbuster machine.

Surplus conifers and hardwoods less than 6" DBH would be felled under prescriptions #1, #3, and #4. For prescriptions #2, #5, #7, and #8 surplus conifers and hardwoods less than 8" DBH would be felled. For prescription #6, surplus conifers would be less than 10" DBH and the hardwoods would be 8" DBH.

Under prescriptions #1, #3, and #4 tanoak between 6 and 12" DBH would be girdled and tanoak greater than 12" DBH would be left uncut. For the other five prescriptions, surplus conifers and hardwoods less than 8" DBH would be felled and tanoak between 8" and 12" would be girdled.

Tanoak greater than 12" DBH would be left uncut.

As part of the brushing and pct prescriptive treatment, slash which is created would be lopped and scattered so it is no more than five (5) feet in length and it is within two (2) feet of the ground.

For conifers, the species preference for retention would be, in declining order of preference: 1) sugar pine or ponderosa pine, 2) Douglas-fir, 3) western red cedar, Port-Orford cedar, or incense cedar, and 4) true fir. For hardwood leave trees, the species preference would be: 1) California black oak, 2) Pacific madrone, 3) Golden chinquapin, and 4) canyon live oak. All dogwood, bigleaf maple and elderberry would be reserved from cutting.

a. Proposed Prescriptions

Table 1 and the discussions below summarize and compare the seven proposed pre-commercial thinning treatment prescriptions. Table 2 describes the conditions under which each type of prescription would generally be used. Riparian Reserve areas occur within many of the proposed treatment units. Management recommendations for riparian reserves would be implemented where ever they occur.

Table 1: Pre-commercial Thinning Treatment Prescriptions						
Rx #	PCT Conifer spacing	Hdwd Spacing	Maint. Brushing	1/4 acre reserve -no treatment areas	Riparian Treatment	Land Allocation where this would be applied.
#1	14' x 14'	25' x 25'	100% maintenance brushing	Not Implemented in Matrix, AMA, or RR. Implement in LSR.	25' no treatment buffer along intermittent without fish and 50' along perennial with or without fish . For madrone only - to the outer edge of the riparian reserve - up to three stems left as leave trees from sprouting madrone. For intermittent without fish , selected brush and tan oak can be cut up to the edge of the stream channel.	Could be used in any land allocation.
#2	1.0"-3.0" DBH @ 14' x 14' 3.1"- 8.0" DBH @ 18' x 18'	25' x 25'	100% maintenance brushing	Not Implemented in Matrix, AMA, or RR. Implement in LSR.	25' no treatment buffer along intermittent without fish and 50' along perennial with or without fish. For madrone only - to the outer edge of the riparian reserve - up to three stems left as leave trees from sprouting madrone. For intermittent without fish , selected brush and tan oak can be cut up to the edge of the stream channel.	Could be used in any land allocation.
#3	16' x 16'	25' x 25'	No maintenance brushing	Not Implemented in Matrix, AMA, or RR. Implement in LSR.	25' no treatment buffer along intermittent without fish and 50' along perennial with or without fish. For madrone only - to the outer edge of the riparian reserve - up to three stems left as leave trees from sprouting madrone. For intermittent without fish, selected brush and tan oak can be cut up to the edge of the stream channel.	Could be used in any land allocation.
#4	16' x 16'	25' x 25'	100% maintenance brushing	Not Implemented in Matrix, AMA, or RR. Implement in LSR.	25' no treatment buffer along intermittent without fish and 50' along perennial with or without fish. For madrone only - to the outer edge of the riparian reserve - up to three stems left as leave trees from sprouting madrone. For intermittent without fish, selected brush and tan oak can be cut up to the edge of the stream channel.	Could be used in any land allocation
#5	18' x 18'	25' x 25'	No maintenance brushing	Not Implemented in Matrix, AMA, or RR. Implement in LSR.	25' no treatment buffer along intermittent without fish and 50' along perennial with or without fish. For madrone only - to the outer edge of the riparian reserve - up to three stems left as leave trees from sprouting madrone. For intermittent without fish, selected brush and tan oak can be cut up to the edge of the stream channel.	Could be used in any land allocation.
#6	Crown based conifer spacing: 8' to 12' between crowns.	25' x 25'	No maintenance brushing	Not Implemented in Matrix, AMA, or RR. Implement in LSR.	25' no treatment buffer along intermittent without fish and 50' along perennial with or without fish. For madrone only - to the outer edge of the riparian reserve - up to three stems left as leave trees from sprouting madrone. For intermittent without fish , selected brush and tan oak can be cut up to the edge of the stream channel.	Primarily in LSRs. Some limited use in other land allocations.
#7	18' x 18'	25' x 25'	100% maintenance brushing	Not Implemented in Matrix, AMA, or RR. Implement in LSR.	25' no treatment buffer along intermittent without fish and 50' along perennial with or without fish. For madrone only - to the outer edge of the riparian reserve - up to three stems left as leave trees from sprouting madrone. For intermittent without fish, selected brush and tan oak can be cut up to the edge of the stream channel.	Could be used in any land allocation.

Table 1: Pre-commercial Thinning Treatment Prescriptions						
Rx #	PCT Conifer spacing	Hdwd Spacing	Maint. Brushing	1/4 acre reserve -no treatment areas	Riparian Treatment	Land Allocation where this would be applied.
#8	Slashbuster Treatment Conifer spacing will use one of these spacing guidelines which are dependent on the site, age, and size class of the treatment unit. a) 16' x 16' or b) 18' x 18'	25' x 25'	100% maintenance brushing	Will only be implemented in LSR land allocation.	25' no treatment buffer along intermittent without fish and 50' along perennial with or without fish. For madrone only - to the outer edge of the riparian reserve - up to three stems left as leave trees from sprouting madrone. For intermittent without fish, selected brush and tan oak can be cut up to the edge of the stream channel. Slashbuster treatment will not be implemented in the no treatment buffers of the Riparian Reserves.	Can be used in all land allocations.

Note: Riparian buffer is defined as a no-treatment area along the edge of the stream or channel. Riparian reserve is defined as shown in the RMP with reserve widths as given for each type of stream classification.

Table 2: Prescription Summary Table by Objectives and Land Allocation.

Rx #	Description of stand where this prescription would be most applicable	Objectives to accomplish through this prescription	Appropriate land allocations	Fuel loading created by this treatment	Remarks
#1	<ul style="list-style-type: none"> - Uniform, predominant one size class stand from 15-20 years of age, where brush competition can still be a problem. - Ave. DBH of dominant conifers would be 4 inches or less. - This prescription would be used in the youngest stands. 	<ul style="list-style-type: none"> - Reduce stand competition from excess conifers, hardwoods, and brush. - Begin the process of stand differentiation of both conifers and hardwoods early in the life of the stand. - Create increased conifer growth in diameter and height. - Reduce the amount of ladder fuels and risk of wildfire. 	<ul style="list-style-type: none"> - All land allocations 	<ul style="list-style-type: none"> - Due to the smaller size class, this prescription would have the lowest level of fuel loading after treatment. - No additional fuels treatment should be needed. 	<ul style="list-style-type: none"> - Another thinning or release would probably be required prior to age 40 or commercial thinning.
#2	<ul style="list-style-type: none"> - Two size class stand from 20 to 30 years of age, where brush competition is still a problem but increased stand growth and differentiation is desired. - Due to the fact that two distinct size classes are present in the stand, the two spacing requirements are needed. 	<ul style="list-style-type: none"> - Reduce competition from excess conifers, hardwoods, and brush. - Increase within stand differentiation which already exists. - Create increased conifer growth in diameter and height. - Reduce the amount of ladder fuels and risk of wildfire. - Implement silvicultural treatments that are beneficial to the creation of late-successional habitat. 	<ul style="list-style-type: none"> - All land allocations. 	<ul style="list-style-type: none"> - Fuel loadings should be moderate to high after treatment. - Fuels treatment could involve fuels treatment with piling and pile burning up to 50% of the hazard fuels created on the unit. 	<ul style="list-style-type: none"> - No additional thinning or release should be needed prior to commercial thinning.
#3	<ul style="list-style-type: none"> - Uniform, predominantly one size class stands 20-25 years of age where brush competition is presently not a problem but where too wide a spacing could bring back the brush and reduce conifer growth. - Wider spacing is needed to prolong the beneficial effects of thinning as well as help produce stand differentiation early in the life of the stand. - Would be used in stands which are in the median range of precommercial growth and development. 	<ul style="list-style-type: none"> - Reduce stand competition from excess conifers and hardwoods. - Create stand differentiation where it presently does not exist. - Create increased conifer growth in diameter and height. - Reduce the amount of ladder fuels and risk of wildfire. - Set the stand on a trajectory so after one additional thinning, the stand can develop to late-successional habitat. 	<ul style="list-style-type: none"> - All land allocations. 	<ul style="list-style-type: none"> - Fuel loadings should be moderate after treatment. - Fuels treatment could involve fuels treatment with piling and pile burning up to 50% of the hazard fuels created on the unit. 	<ul style="list-style-type: none"> - Another thinning or release would probably be required prior to commercial thinning.

Table 2: Prescription Summary Table by Objectives and Land Allocation.

Rx #	Description of stand where this prescription would be most applicable	Objectives to accomplish through this prescription	Appropriate land allocations	Fuel loading created by this treatment	Remarks
#4	<ul style="list-style-type: none"> - Uniform, predominantly one size class stand from 15-25 years of age where brush competition is still a problem but where wider spacing is desired for increased growth and stand development. - This prescription would be used in those stands which are in the median range of precommercial growth and development. 	<ul style="list-style-type: none"> - Reduce stand competition from excess conifers and hardwoods. - Create stand differentiation where it presently does not exist. - Create increased conifer growth in diameter and height. - Reduce the amount of ladder fuels and risk of wildfire. - Set the stand on a trajectory so after one additional thinning, the stand can develop to late-successional habitat. 	<ul style="list-style-type: none"> - All land allocations 	<ul style="list-style-type: none"> - Fuel loadings should be moderate after treatment. - Fuels treatment could involve fuels treatment with piling and pile burning up to 50% of the hazard fuels created on the unit. 	<ul style="list-style-type: none"> - Another thinning or release would probably be required prior to commercial thinning.
#5	<ul style="list-style-type: none"> - Stands from 20 to greater than 30 years old where wider conifer spacing is desired for increased growth and stand differentiation. - This may be used in stands which have already been thinned in the past, but too many trees still exist on the site. - Stand has developed and is now established, so brush competition is not a problem. 	<ul style="list-style-type: none"> - Reduce stand competition from excess conifers and hardwoods. - Increase the stand differentiation which already exists within the stand. - Create increased conifer growth in diameter and height. - Reduce the amount of ladder fuels and risk of wildfire. - Implement silvicultural treatments that are beneficial to the creation of late-successional habitat. 	<ul style="list-style-type: none"> - Largest application would be for non-LSR land allocations. 	<ul style="list-style-type: none"> - Fuel loadings should be high after treatment. - Fuels treatment could involve fuels treatment with piling and pile burning up to 100% of the hazard fuels created on the unit. 	<ul style="list-style-type: none"> - No additional thinning or release should be needed prior to commercial thinning.

Table 2: Prescription Summary Table by Objectives and Land Allocation.

Rx #	Description of stand where this prescription would be most applicable	Objectives to accomplish through this prescription	Appropriate land allocations	Fuel loading created by this treatment	Remarks
#6	<ul style="list-style-type: none"> - Predominant use for the largest and oldest reforestation or stands with at least two distinct size classes present. - Age can range from approximately 20 to greater than 30 years. - Stand is well established, with little to no brush competition, and conifers are competing for limited moisture and light. - In limited cases, this prescription may also be used in older conifer stands of a single age class. - This prescription would be used where the widest spacing is required. - This prescription would be a good choice for LSR and would help speed development to mature and late-successional forest conditions, as well as creating more stand diversity. 	<ul style="list-style-type: none"> - Reduce stand competition from excess conifers and hardwoods. - Help the stand to develop to mature and late-successional forest conditions. - Create a diversity of habitat and stand structure. - Create increased conifer growth in diameter and height. - Reduce the amount of ladder fuels and risk of wildfire. 	<ul style="list-style-type: none"> - Largest application would be for LSR land allocation. - Could have some limited use in Matrix, AMA, or Riparian Reserve. 	<ul style="list-style-type: none"> - Fuel loadings should be high after treatment. - Fuels treatment could involve fuels treatment with piling and pile burning up to 100% of the hazard fuels created on the unit. 	<ul style="list-style-type: none"> - No additional thinning or release should be needed prior to commercial thinning.
#7	<ul style="list-style-type: none"> - Predominant use for stands which are 20 years or older where wide spacing is desired but brush competition still needs to be addressed. 	<ul style="list-style-type: none"> - Reduce stand competition from excess conifers, hardwoods, and brush. - Increase the stand differentiation which already exists within the stand. - Create increased conifer growth in diameter and height. - Help the stand to develop to mature and late-successional forest conditions. 	<ul style="list-style-type: none"> - Could be used in all land allocations. 	<ul style="list-style-type: none"> - Due to the large size of material being felled, this prescription would probably have the highest level of fuel loading to treat. - Fuels treatment could involve fuels treatment with piling and pile burning up to 100% of the hazard fuels created on the unit. 	<ul style="list-style-type: none"> - No additional thinning or release should be needed prior to age 40 or commercial thinning.

Table 2: Prescription Summary Table by Objectives and Land Allocation.					
Rx #	Description of stand where this prescription would be most applicable	Objectives to accomplish through this prescription	Appropriate land allocations	Fuel loading created by this treatment	Remarks
#8	<ul style="list-style-type: none"> - Predominant use for stands which are 20 years or older where wide spacing is desired but brush competition still needs to be addressed. - Use would be for those units where it is more economical to treat with the slashbuster as well as more effective in dealing with the fuels hazard created. - Conifer spacing would be either 16' x 16' or 18' x 18' dependent on size and age class. 	<ul style="list-style-type: none"> - Reduce stand competition from excess conifers, hardwoods, and brush. - Increase the stand differentiation which already exists within the stand. - Create increased conifer growth in diameter and height. - Help the stand to develop to mature and late-successional forest conditions. 	-Could be used in all land allocations.	<ul style="list-style-type: none"> -Due to the nature of slashbuster treatment, and the amount of slash and brush crushed, very little fuels hazard will remain after treatment. - No further fuels treatment prescribed. 	<ul style="list-style-type: none"> - No additional thinning or release should be needed prior to age 40 or commercial thinning. - Slashbuster use would be limited to slopes less than 45%. - Slashbuster use would be prohibited in no treatment buffer of riparian reserve.

1) Prescription # 1: Young stand PCT with maintenance brushing

Conifer leave trees would be selected on an 14' x 14' basis, with hardwood spacing left at approximately 25' x 25' spacing. Only conifers less than 6" DBH would be cut. Conifers greater than 6" DBH would be a leave tree. This would result in approximately 222 vigorous, well-formed conifer leave trees per acre and approximately 70 hardwood leave trees or one stem of a sprouting hardwood stump left per acre. Within riparian reserves, and only for madrone, up to three (3) stems would be left when madrone is selected as a hardwood leave tree. Within a relatively short time (approximately one to three years after this treatment), the total hardwood stems per acre would exceed these levels, however, since mechanical cutting of hardwood stems does not kill the tree and the stems would sprout back.

This prescription is used in order to produce the desired future condition of a predominant even-aged stand of evenly spaced conifers of mixed species with 100% brushing / cutting of all brush and surplus vegetation. This will better insure survival and continued growth of the stand.

In addition, by leaving a hardwood component within the unit, stand structure and diversity is maintained and enhanced due to an increased growth rate for residual conifer and hardwood trees. Where this prescription is used in an LSR, an untreated area of approximately 1/4 acre (110' x 110') would be left for every 5 acres. These untreated areas would be space approximately 500' apart and no closer than 100' from a unit boundary. These untreated areas would not adjoin roads or riparian buffers.

The purpose of these untreated areas is to help maintain stand diversity as well as provide valuable wildlife cover.

Over time this prescription would maintain or increase stand structure because the conifer and hardwood components would exhibit different growth rates and terms of total height and crown

development. This would accelerate the rate of succession and stand development.

Where this prescription is applied within the Matrix and AMA land allocations, the 1/4 untreated areas would not be implemented.

On most of the units where this prescription is applied, it is estimated that one more pct treatment would be required prior to approximately age 40 or when the stands would be of a commercial thinning size.

2) Prescription #2: Variable conifer spacing based on DBH

The purpose of this prescription / treatment is to create or maintain a mosaic of forest conditions, retain species diversity while emphasizing species desired to meet long term management objectives of the land allocation, and to set the stage for developing canopy gaps which would enable establishment of multiple tree layers and diverse species composition.

Leave trees, including both conifer and hardwood species selected for additional growing space, would grow faster and larger, become more vigorous and resistant to disease or insects, accelerating vertical differentiation within the stand, and shorten the time required for the stand to reach mature or old-growth characteristics.

The majority of stands where this treatment would be implemented are stands that have densities of 350+ trees per acre. The treatment prescribed would reduce the density to approximately 134-222 vigorous, well-formed conifer leave trees per acre, and approximately 70 hardwood leave trees or one stem of a sprouting hardwood stump per acre. Within riparian reserves, and only for madrone, up to three (3) stems would be left when madrone is selected as a leave tree. Within a relatively short time (approximately 1 - 3 years after treatment), the total hardwood stems per acre would exceed these levels due to the stem sprouting that occurs after mechanically cutting of hardwoods (the tree is rarely killed).

This prescription contains a variable spacing guideline based on diameter class. Conifer leave trees would be left at 14' x 14' spacing when the dominant trees are between 1" and 3" DBH. Hardwood spacing would be maintained at 25' x 25' spacing. For conifers with DBH between 3" and 8" DBH, the spacing would be maintained at 18' x 18' spacing. In areas where more than one DBH class is present, the larger spacing would prevail. Conifers greater than 8" DBH would not be cut, but would be considered in the spacing. Maintenance brushing is included as part of the treatment.

Where this prescription is used in an LSR, an untreated area of approximately 1/4 acre (110' x 110') would be left for every 5 acres. These untreated areas would be spaced approximately 500' apart and no closer than 100' from a unit boundary, and would not adjoin roads or riparian buffers. Guidelines defined under Prescription #1 concerning location and distance from roads for these uncut reserve patches would be followed. No reserve patches would be left in units in the Matrix or AMA land allocation.

It is anticipated that the next treatment to occur within the unit would be a commercial thinning at approximately age 40.

3) Prescription # 3: Young stand PCT without maintenance brushing

The purpose of this prescription is to produce a desired future condition of a predominant even-aged stand of evenly spaced conifers of mixed species with removal of surplus conifer and hardwood vegetation, without 100% brushing. This would be used in stands where brush competition is not a problem. Its' emphasis is to ensure increased growth of selected conifers and hardwood leave trees. The wider spacing of 16' x 16' should give conifers the additional growing space needed at this stage of growth.

Conifer leave trees would be spaced to a 16' x 16' spacing. Hardwood spacing would be left at approximately 25' x 25' spacing. The resultant number of conifer leave trees per acre would be approximately 170. Approximately 70 hardwood leave trees or one stem of a sprouting hardwood stump per acre would be left. Within riparian reserves, and only for madrone, up to three (3) stems would be left when madrone is selected as a leave tree. Within a relatively short time (approximately 1 - 3 years after treatment) the total hardwood stems per acre would exceed these levels however, because mechanically cutting hardwood stems does not kill the tree and the stems would sprout back.

Conifer trees cut would primarily be 6" DBH or less. No hardwoods greater than 6" DBH would be cut except in the case of tanoak. Surplus tanoak 6" - 12" DBH would be girdled. All conifers greater than 6" DBH would be reserved.

Where this prescription is used in an LSR, an untreated area of approximately 1/4 acre (110' x 110') would be left for every 5 acres. These untreated areas would be spaced approximately 500' apart and no closer than 100' from a unit boundary. Guidelines defined under Prescription #1 concerning location and distance from roads for these uncut reserve patches would be followed. These untreated areas would not adjoin roads or riparian buffers. These untreated areas would not be retained when the unit is within the matrix or AMA land allocations.

For some of the stands in the matrix or AMA, an additional precommercial thinning treatment may be required before approximately age 40 and commercial thinning.

4) Prescription # 4: Young stand PCT with maintenance brushing

The purpose of this prescription is to produce a desired future condition of a predominant even-aged stand of evenly spaced conifers of mixed species with removal of surplus conifer and hardwood vegetation, with 100% brushing. It would be used in stands where brush competition is still a problem. Its' emphasis is to ensure increased growth of selected conifers and hardwood leave trees. The wider spacing of 16' x 16' should give conifers the additional growing space needed at this stage of growth.

Conifer leave trees would be spaced to a 16' x 16' spacing. Hardwood spacing would be left at approximately 25' x 25' spacing. The resultant number of conifer leave trees per acre would be approximately 170. Approximately 70 hardwood leave trees or one stem of a sprouting hardwood stump per acre would be left. Within riparian reserves, and only for madrone, up to three (3) stems would be left when madrone is selected as a leave tree. Within a relatively short time (approximately 1 - 3 years after treatment) the total hardwood stems per acre would exceed these levels however, because mechanically cutting hardwood stems does not kill the tree and the stems would sprout back.

Conifer trees cut would primarily be 6" DBH or less. No hardwoods greater than 6" DBH would be cut except in the case of tanoak. Surplus tanoak 6" - 12" DBH would be girdled. All conifers greater than 6" DBH would be reserved.

Where this prescription is used in an LSR, an untreated area of approximately 1/4 acre (110' x 110') would be left for every 5 acres. These untreated areas would be spaced approximately 500' apart and no closer than 100' from a unit boundary. Guidelines defined under Prescription #1 concerning location and distance from roads for these uncut reserve patches would be followed. These untreated areas would not adjoin roads or riparian buffers. These untreated areas would not be retained when the unit is within the matrix or AMA land allocations.

For some of the stands in the matrix or AMA, an additional Pct treatment may be required before approximately age 40 and commercial thinning.

5) Prescription #5: Wider spacing PCT without maintenance brushing

This prescription is designed to be used where previous precommercial spacing guidelines have left too many conifer reserve trees per acre and would usually be implemented where most of the conifers are around the same age class and size. It would usually be implemented in stands which are 20 to 30 years of age and where larger size classes of conifers are present. Thinning to the a wider spacing would help move the unit toward mature and late seral stand conditions at an earlier stage of growth.

Conifer leave trees would be selected on an 18' x 18' basis. Residual hardwood spacing would be approximately 25' x 25'. The principal cut trees being removed would be 8" DBH or less. No hardwoods greater than 8" DBH would be treated except in the case of tanoak. Surplus tanoak 8" to 12" DBH would be girdled. Conifers greater than 8" DBH would not be cut.

The number of conifer leave trees per acre would be approximately 134, and the number of hardwood trees approximately 70 or one stem of a sprouting hardwood stump. Within riparian reserves, and only for madrone, up to three (3) stems would be left when madrone is selected as a leave tree. Within a relatively short time (approximately 1 - 3 years), the total hardwood stems per acre would exceed these levels because mechanically cut hardwoods rarely die but do sprout back.

In units in an LSR, 1/4 acre uncut areas would be maintained at an approximate density of one area per

5 acres. No reserve patches would be left in Matrix or AMA. The guidelines of Prescription #1 concerning location and distance from roads for these uncut reserve patches would be followed.

6) Prescription #6: Crown based conifer spacing

This prescription is designed for older stands either of one large size class or where at least two distinct size classes of conifers are present. In the past, standard spacing guidelines have not worked for this type of unit and have left stocking levels that are too high. This prescription is designed to be used for our oldest and largest size class stands which need pre-commercial thinning. Therefore, this prescription is designed where wider crown based spacing guidelines can be used and enough growing space would be created where no further treatment should be needed until the youngest age class reaches age 40 at which time a commercial thinning would be expected.

This prescription would result in approximately 70-108 vigorous, well-formed conifer leave trees per acre. Crown based spacing will allow spacing to vary by the size and age of the stand. Spacing is based on the distance between the outside drip line and crown of conifer reserve trees. The distance between crowns (outside drip line of conifer reserve trees) would range from approximately 8 to 12'. For dominant conifer trees with DBH less than 5", the spacing between crowns would be 8'. For dominant conifer trees with DBH over 5", crown spacing would be 12'.

The conifer trees cut would primarily be 10" DBH or less. No hardwood trees greater than 8" DBH would be cut except surplus tanoak from 8" to 12" DBH would be girdled. Hardwoods would be spaced at 25' x 25' spacing leaving approximately 70 hardwood trees or one stem of a sprouting hardwood stump per acre. Within riparian reserves, and only for madrone, up to three (3) stems would be left when madrone is selected as a leave tree. Within a relatively short time (approximately 1 - 3 years after treatment), the total number of hardwood stems per acre would exceed these levels however, because mechanical cutting of hardwood stems rarely kills the tree; the stems sprout back.

This prescription would be used mainly for LSR land allocation in order to accelerate the development of late-successional forest conditions. However, there may be some limited use of this prescription in the other land allocations.

In units in an LSR, 1/4 acre uncut areas would be maintained at an approximate density of one area per 5 acres. No reserve patches would be left in Matrix or AMA. The guidelines of Prescription #1 concerning location and distance from roads for these uncut reserve patches would be followed.

No maintenance brushing should be needed because the stand is well established and the trees are well above the brush height.

7) Prescription #7: Wider spacing PCT w/ maintenance brushing

This prescription is designed for those units with a conifer stand aged 20+ years and with the dominant conifers averaging 4" DBH or more and where wider spacing as well as 100% maintenance brushing is

needed.

Conifer leave trees would be selected on an 18' x 18' basis; hardwood spacing at approximately 25' x 25' spacing. The trees cut would primarily be 8" DBH or less. No hardwood trees greater than 8" DBH would be cut except surplus tanoak from 8" to 12" DBH would be girdled. No conifer greater than 8" DBH would be cut.

The number of conifer leave trees would be approximately 134 per acre and hardwood trees would be left at approximately 70 or one stem of a sprouting hardwood stump per acre. Within riparian reserve, and only for madrone, up to three (3) stems would be left when madrone is selected as a hardwood leave tree. Within a relatively short time (approximately 1-3 years after treatment), the total hardwood stems per acre would exceed these levels because mechanically cutting hardwood stems does not kill the tree and the stems would sprout back.

In units in an LSR, 1/4 acre uncut areas would be maintained at an approximate density of one area per 5 acres. No reserve patches would be left in Matrix or AMA. The guidelines of Prescription #1 concerning location and distance from roads for these uncut reserve patches would be followed.

8) Prescription #8: Precommercial Thinning using a Slashbuster machine

This prescription is designed for those units where a slashbuster machine could be used based on site conditions (e.g., slope and soils) and applicability of the machine to accomplish the stand's thinning goals. Due to the accomplishment of both pct and fuel hazard reduction in one entry, this would be a good choice where a more economical method of fuel hazard reduction is required or where fuels concerns dictate the use of this method. (i.e., areas of high fuel hazard or risk or near to urban interface or other fuels treatment projects such as fuel breaks). It is also applicable to stands where wider spacing as well as 100% maintenance brushing is needed. Usually, it would be implemented in older stands where the conifer regeneration is well established but brush competition could still present a problem if it is not treated.

Units with a large component of tan oak present would be included in this category of units to treat with this prescription. Use of this type of treatment would result in the tan oak being suppressed for a longer period of time than conventional treatment with chainsaws.

Conifer leave trees would be selected on an 18' x 18' basis or 16' by 16' basis, dependent on the age of the dominant conifers and stand size; with hardwood spacing at approximately 25' x 25' spacing.

The trees cut would primarily be 8" DBH or less. No hardwood trees greater than 8" DBH would be cut except surplus tanoak from 8" to 12" DBH would be girdled. No conifer greater than 8" DBH would be cut.

The number of conifer leave trees would be approximately 134 per acre (18' x 18') or 170 per acre

(16' x 16') and hardwood trees would be left at approximately 70 or one stem of a sprouting hardwood stump per acre. Due to the difficulty of implementing three stem madrone guidelines with a slashbuster, for this prescription only, single stems of hardwoods or hardwood sprouts would be left within the riparian reserve when madrone is selected as a hardwood leave tree.

In units in an LSR, 1/4 acre uncut areas would be maintained at an approximate density of one area per 5 acres. No reserve patches would be left in Matrix or AMA. The guidelines of Prescription #1 concerning location and distance from roads for these uncut reserve patches would be followed.

4. Slash treatment / Fuel hazard reduction

Slash created by the brushing and/or precommercial thinning treatments would be treated by hand piling and burning or by mechanical shredding as a part of the slashbuster treatments. Slash would be treated in those stands or portions of stands where fuel hazard and risk assessments indicate the need for it. Available funding for such work would be a factor determining the extent of treatment that would occur. Recommended fuels treatments are included in Table 3 and also are shown on Table 6 with the list of proposed silvicultural treatments and potential hazard reduction units.

Table 3: Fuels treatment recommendations	
Fuel treatment prescription	Type of treatment recommended based on hazard, risk, priority, and amount of fuel loadings created from the proposed silvicultural treatment.
#1	Slashbuster
#2	Hand piling and hand pile burning up to 100% of the hazard fuels created on the unit.
#3	Hand piling and hand pile burning up to 50% of the hazard fuels created on the unit.
#4	No fuels treatment recommended.

a. Fuel hazard and risk assessment

An initial assessment of each unit has determined the probable need for fuel hazard reduction after the proposed thinning treatments. The assessment considers hazard, risk and values at risk. The fuel treatments proposed in Table 4 and 6 are based on this initial assessment.

Hazard is defined by a fire's ability to spread and thus the fire's resistance to control once a wildfire has ignited. Hazard is rated using a numerical points system for each of the following factors: Slope, Aspect, Position on Slope, Adjacent Fuel Model, Ladder Fuels and estimated fuel loadings following the thinning/brushing treatments. A points summary is then calculated and a rating of high, moderate or low is assigned.

Risk is defined as the source of ignition. A rating of high, moderate or low is assigned based on human presence and use and on lightning occurrence.

Values at risk are based on a consideration of human and resource values within planning areas. Conditions considered include land allocations, special use areas, human improvements/monetary investment, residential areas, agricultural use, structures present, soils, vegetative conditions and wildlife habitat. This assessment ranks the values at risk in a unit at high, moderate or low.

Also considered is a unit's proximity to specific "communities at risk" as identified in the National Fire Plan. These are communities located within the "urban wildland interface" and are communities that are adjacent to or near public lands that pose a threat of wildfire. They are to be given special consideration for fuels treatment.

The need for fuel reduction treatments are again reviewed after the thinning treatments are completed. This field review is to update the hazard/risk assessment and to ensure that the fuel treatment prescription and prioritization are the most appropriate. The field review would verify the estimated hazard and risk using a numerical field rating guide similar to the initial assessment. In addition the following factors would be considered: 1) fuel continuity, 2) access, 3) fuel loading, and 4) proximity to previously treated or proposed hazard reduction areas.

A final determination for fuel treatment needs and priorities would be based on both the preliminary and field hazard/risk assessments. Prioritization for treatment is based on both hazard and risk priorities and available funding. Factors that influence priority include strategic hazard reduction, distribution and location to private lands and other land management projects.

The actual extent of slash treatment would be dependent on available funding. It is anticipated that only 5% of the total acreage listed in Table 6 would actually receive treatment.

Recommended fuels treatment priority is shown in Table 4 below as well as included with the potential hazard reduction units shown on Table 6. Unit maps are located in Appendix B.

Table 4: Determining Fuels Treatment Priority	
Fuels Treatment Priority	Rating Criteria Used
1	Units within designated communities at risk boundaries. Units adjacent to planned or accomplished fuel hazard reduction projects. Units with 2 (two) or more "high" ratings in the hazard, risk or value categories as determined by the watershed analysis.
2	Units with a hazard rating of "low" Units with 1 (one) high rating and 2 (two) moderate ratings in the hazard, risk or value categories as determined by the watershed analysis.
3	Units with no high ratings in the hazard, risk or value categories as determined by the watershed analysis. All other units.

When only portions of a unit or stand are to be treated, the areas selected for hazard reduction treatment are critical points on the sites such as where the highest potential loss would be experienced if

a wildfire occurred, or along areas where a high risk of an ignition source would be present (e.g., along heavily used roads).

b. Hand piling and pile burning

The purpose of the hand piling and pile burning is to reduce the fire and fuel hazard created by these various silvicultural practices either throughout an entire unit or at strategic locations in a unit (e.g., road sides, ridge tops and along property boundaries adjacent to private land).

Due to cost and funding considerations, only a portion of the thinned units would be treated. Priority would be to treat those units which have the highest hazard and risk ratings.

Units where hand piling and pile burning is proposed are shown on Table 6. In these units slash 2' long and less than 6" diameter would be hand piled. Chainsaws may be utilized to reduce the size of the slash to sizes appropriate for hand piling. Maximum pile size would be approximately 5' in diameter by 6' in height. All piles would be covered with a 5' x 5' sheet of 4-mil polyethylene plastic. At least 3/4 of the pile's surface would be covered and the plastic anchored to preserve a dry ignition point. Slash piles would not be placed on logs, stumps, talus slopes, in roadways or drainage ditches. Piles would not be closer than 10' to trees or 25' to a unit boundary.

The density of resultant piles (#/acre) would vary depending on the nature of the individual unit. Typically, the number of piles in pre-commercially thinned and brushed units is approximately 35 to 60 piles/acre with average spacing between each pile ranging from 20' to 30'.

Units with brushing alone (no PCT) typically result in approximately 25 to 35 piles per acre with an average spacing between each pile ranging from 30' to 40'.

Ignition of piles would be with drip torches or other hand held devices. Burning would be done in the fall/winter season after significant rainfall has occurred. "Significant rainfall" means one inch in a 48 hour period, or a cumulative amount that wets the litter and duff layer and penetrates the mineral soil layer to 1/4 inch or more. These conditions would typically prevent the spread of fire outside the burning pile and minimize the risk of an escape. A prescribed burn plan would be prepared to address burning objectives and operational concerns. Prescribed burn plans include weather parameters and design features to diminish any potential of fire escape.

All piles would be ignited except those within a designated no treatment zone of a riparian reserve. The number of piles typically consumed is 85 to 95 % of the total piled.

Due to differences in vegetation and silvicultural treatment, pile density in riparian reserves is typically 5 to 10% lower than the upland areas. The amount of slash generated may necessitate placing a hand pile within a no treatment zone area in order to remove the fuel up to the no treatment zone line. Hand piles within riparian reserves would be ignited, except those within the no treatment zones.

c. Fuel reduction using the Slashbuster (Prescription #8)

Table 6 indicates which units will be PCTed and fuel hazard reduction using a “slashbuster” (an excavator equipped with a 30+ foot boom and a hydraulic chipping/shredding head). The machine mechanically shreds and chips slash and/or live vegetation. The treatment immediately and substantially alters the fuel profile thereby reducing the potential need for subsequent prescribed burning and lowers burn intensities where prescribed fire has a role. It would result in fuel conditions that make fire control easier in the event of a wildfire.

In addition, this type of treatment would give results similar to pre-commercially thinned units with the added benefit of fuel hazard reduction, all done with one entry and treatment.

Residual conifer spacing will be approximately 18' x 18' or 16' x 16' and hardwoods at 25' x 25' with 100% maintenance brushing. The choice of which conifer spacing to use will be dependent on stand age and development. Treatment costs are highly favorable as compared to the hand piling and burning treatments. This treatment would not be used where the slope percent is 35% or greater and may be used in portions of units along ridge tops or other favorable treatment areas within units. Where only a portion of a unit can be treated with a slashbuster, the rest of the unit will be treated using manual methods and chainsaws under prescription 4 or 7, depending on stand density.

Slashbuster operations will not operate within the no treatment fuels riparian buffer within 50 feet of from the edge of the stream (class 1-4). In addition, no slashbuster operations will be conducted within special status plant buffers.

The types of stands which would have this type of treatment would include older and two size class regeneration stands where the amount of slash which would be created from conventional treatment of PCT with hand piling and hand pile burning would be excessive in both amount and cost to treat. There is some possibility of treating younger stands, if the site conditions, location, and cost savings in fuel hazard reduction justify the use of the slashbuster rather than chainsaws.

C. Project Design Features

Project design features (PDFs) are included for the purpose of reducing anticipated adverse environmental impacts identified in the scoping process and which might stem from the implementation of the proposed action. This section outlines these PDFs.

1. Air Quality / Smoke Management

To conform with air quality standards and guidelines, all prescribed burning would be managed in a manner consistent with the requirements of the Oregon Smoke Management Plan and the Department of Environmental Quality's Air Quality and Visibility Protection Program. When burn units are adjacent to rural residential areas, burning would be timed to minimize the amount of residual smoke. This can be accomplished by burning when conditions for smoke dispersal are optimal such as during rainy days and periods when atmospheric instability is present.

Patrol and mop-up of burned piles would occur when needed to prevent burned areas from reburning or becoming an escaped fire.

2. Special Status Species and Cultural Resources

Special status plant surveys would be conducted for all units proposed for treatment (Table 5). Identified plant locations would be buffered per the current management recommendations. No brushing, pre-commercial thinning, hardwood cutting, or fuels treatment work would occur within the buffers. In addition, the cultural resource specialist would be consulted prior to implementation and if any cultural sites are located within the units, buffers would be placed where needed. Measures appropriate to protect cultural sites and/or species would be taken. These could include timing of treatment, buffering of areas to preclude treatment, or no treatment of the area.

Since these are young stands, surveys for animal species of concern are not required. However, to the extent possible, piles would not be located in areas of talus. Piles placed in these areas would not be burned. Piles would not be placed on existing large woody material.

During periods of high temperatures and low ground moisture conditions, mollusc may seek out covered piles as refugia. To reduce potential impacts to mollusc, pile burning would be done when temperatures and ground moisture conditions are conducive to mollusc dispersal away from covered piles. These are conditions similar to those required for safe and efficient pile burning.

Piles would not be burned within 50 feet of the drip line of trees with confirmed active red tree vole nests.

3. Riparian Reserves Treatment and no treatment Buffer

Riparian Reserve treatment - Table 5 shows the no treatment buffer widths that would be implemented within riparian reserves.

Table 5: No Treatment Widths Within the Riparian Reserve			
Stream Designation	Riparian Reserve Widths	Type of Treatment	"No treatment" buffer widths
Perennial with fish	300' slope distance from the edge of the stream.	Pre-commercial Thin (PCT) and/or Brushing	A 50' horizontal distance as measured from the edge of the stream channel. No brush or hardwoods would be cut within this buffer zone.
Perennial w/o fish	150' slope distance from the edge of the stream.	Pre-commercial Thin (PCT) and/or Brushing	The "no treatment" buffer is 50' horizontal distance from the edge of the stream channel.
Intermittent w/o fish	100' slope distance from the edge of the stream channel.	Pre-commercial Thin (PCT) and/or Brushing	A 25' horizontal distance as measured from the edge of the stream channel. However, within this buffer selected brush and tan oak species can be removed.

Table 5: No Treatment Widths Within the Riparian Reserve			
Stream Designation	Riparian Reserve Widths	Type of Treatment	"No treatment" buffer widths
Perennial with & w/o fish and intermittent w/o fish	As above	All Fuel Treatments	50' horizontal distance from edge of stream.

*Note: Perennial with fish may be anadromous or resident, but the riparian reserve width is the same. Other riparian reserve widths from NFP - *Lakes and natural ponds* - 300 feet slope distance from the outer edge of the body of water. *Constructed ponds and reservoirs and wetlands greater than one acre* - 150 feet slope distance from the outer edge of the body of water or wetland.

In the riparian reserves of intermittent streams without fish, a 25' horizontal limited activity buffer would be retained on each side of the stream. Within this area, brush and tanoak would be cut, and all other hardwoods and conifers would be left uncut.

For those units to be treated by hand (i.e., not the slashbuster treated units), outside of the no treatment buffer, the riparian reserve treatment would be the same as that described above for the uplands, except with regard to the treatment of madrone. For madrone, up to three (3) stems could be left on a stump. This would help provide wider canopy madrone crowns which are desirable for wildlife use. For other sprouting hardwood tree species, only one (1) main stem would be left as the leave tree.

4. Remnant Habitat for Fungi and Bryophytes

All treatment prescriptions and fuel hazard reduction treatments would include special treatment guidelines for protecting current habitat and populations of fungi and bryophytes that occupy tree boles or are in the canopy. Conifer and hardwood trees larger than 16" DBH are the sites of concern. No hand piling or hand pile burning would be implemented closer than 10' from the boles of any trees with a 16"+ DBH (all land allocations).

5. Seasonal operating restrictions

Maintenance brushing would take place from approximately April 15 to approximately July 31. The actual ending date would be determined by IFPL fire restrictions. Fall work would occur between approximately October 15 when IFPL restrictions permit and November 30.

Pre-commercial thinning would take place from approximately July 8 until approximately November 29. Work would be stopped during the summer months when IFPL fire restrictions preclude it.

Slashbuster work would take place from approximately May 1 to approximately November 29 when appropriate soil moisture conditions exist. Slashbuster operations will be permitted only when soil moisture content is less than 20% at the 6" depth on non-serpentine soils and 20% at the 8-12" depth on serpentine derived soils. Also, work would be stopped during the summer months when IFPL fire restrictions require it.

Seasonal operating constraints would be included to reduce potential impacts to certain wildlife species where the particular species is determined to be present. Constraints would be per the Medford District RMP and USFWS Biological Opinion #1-7-96-F-392 for BLM silviculture projects 1996 through 2005:

Spotted Owls - No work involving chainsaws would be permitted within 0.25 mile of an known active spotted owl nest or activity center between March 1 and June 15. (Note: The spotted owl related operating season is less restrictive than that required in the RMP, however, the fact that it is specifically approved by the USFWS supports it being treated as a permissible exception.)

Marbled Murrelet - Work involving chainsaws would be permitted within 0.25-mile of known occupied marbled murrelet sites, or unsurveyed suitable marbled murrelet habitat, no earlier than two hours after sunrise and no later than two hours before sunset from April 1 - September 15.

Bald Eagle - Work activities within 1/4 mile non line-of-sight or 1/2 mile line-of-sight of active bald eagle nests would be restricted to between January 1 - August 1.

Peregrine falcons - Avoid disturbance to pairs between February 1 - August 1 (RMP).

Other raptors - Between March 1 and July 15 and within 1/4 mile of nest sites or activity centers, no disturbances that may disturb or interfere with nesting (RMP) would be permitted.

Some of the units proposed for treatment are accessed by natural surfaced roads. Use of these natural surface roads would be precluded between October 15 and May 15. Exception to this would be considered if road and weather conditions are such that road surface damage would not occur.

6. Port-Orford Cedar Root Disease Restrictions

Units have been surveyed prior to silvicultural treatment to determine presence or absence of POC and/or the pathogen *Phytophthora lateralis* (*Pl*). Fifty-three (53) units have been identified (See Table 6) with POC. Operations in units with POC infected with *Pl* (10 units) would be confined to the dry season or periods when roads and soils are dry, typically between May 15 and October 15. Within the dry season, no work would be permitted during rain events (when water puddles on the road) to prevent mud from being transferred to other areas.

Chapter 3

Environmental Consequences

A. Introduction

Only substantive site-specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this chapter. If an ecological component is not discussed, it should be assumed that the resource specialists have considered affects to that component and found the proposed action or alternatives would have minimal or no affects. Similarly, unless addressed specifically, the following were found not to be affected by the proposed action or alternatives: air quality; areas of critical environmental concern (ACEC); cultural or historical resources; Native American religious sites; prime or unique farmlands; floodplains; endangered, threatened or sensitive plant, animal or fish species; water quality; wetlands/riparian zones; wild and scenic rivers; and wilderness areas. In addition, hazardous waste or materials are not directly involved in the proposed action or alternatives.

B. Effects of the Proposed Action

1. Resource: Soils and Water

a. Affected Environment

Units proposed to be treated are located in most fifth field watersheds in the Grants Pass Resource Area. Removal of fuels, hand piling, and burning would, for the most part, be done outside of designated no treatment zones (NTZ) within the riparian reserves. Occasionally a hand pile would occur within the NTZ but none of these piles would be burned. Riparian reserve streams within the project units are predominately perennial and without fish and intermittent without fish with a few fish-bearing streams. These streams are predominately Rosgen A or AA+ streams in sloping draws. All mainstreams in fifth field watersheds are water quality limited for summer temperature.

b. Environmental Consequences

1) Alternative 1: No Action

The heightened wildland fire hazard due to the recent addition of thinning / brushing slash results in an increased likelihood of damaged soils from hot fire occurrences in the future. Hot fires can cause highly reduced organic matter content in the upper mineral soil and on the soil surface. This could have two consequences on soil and water quality:

- a) Increased erosion and sedimentation. Sediment would reach class 3 and 4 streams and would reach fish streams in pulses depending upon precipitation rates following fire. Re-vegetation and new plant growth would slowly take place (see 2 below) and sediment quantities to the stream system would diminish through the short term. In an estimated 10 years

sediment rates would return to current levels.

b) Due to loss of duff/litter layer and loss of the organic matter in the upper mineral soil which is an important source of nutrients, soil productivity could substantially decline within these units.

2) Alternative 2: Proposed Action

Assuming a high average of 60 piles per acre with each pile covering 28 ft², burned spots after piles are burned would cover less than 6% of the ground surface. Assuming that most of the burned piles would result in a spot on which the soil has a substantial reduction of organic matter, this would result in reduction of soil productivity for the individual spots. Since the burned spots would occupy less than 6% of the treated units the overall reduction of soil productivity rate will be minimal.

Erosion/sedimentation should not be a factor as the spots would be islands surrounded by a matrix of vegetative and litter cover.

An estimated 7 to 15% of the total treatment area will be treated by slashbuster. Slashbusters move over the ground debris that they create. They also have a low bearing weight per area contacted by the tracks. A project design feature calls for soil moisture of 20% or less during slashbusting treatment. The combination of the above should reduce the soil compaction to less than 10% increase in soil bulk density in 15 to 25% of the treated area. This is negligible and should result in no measurable loss of long term soil productivity. An estimated 2 to 8 inches of slashbusted debris will be left on the ground. This blanket of material will be fresh green ground woody material. For the first 2 to 5 years this material will absorb and hold most available nitrogen until decomposition is complete. During this period plant growth rates will be retarded compared to non treated condition. After the period of decomposition nitrogen will be released and growth rates should increase for one to two years. There may be some effect on soil macro invertebrate /vertebrate populations and their ecological functions. However, the nature and extent of any such effect is not known.

After either of the above treatments fire hazard will be reduced, so if wild fire should burn on one of the treated units the fire intensity would be less than without the treatment (No action). Any resultant increase in erosion/sedimentation would thus likely be far less than without the treatment if a fire should occur. Also the resulting decrease in soil productivity would likely be far less than without the treatment if a fire should occur.

The above treatments would result in no continuous surface runoff route to streams because of no treatment zones on each side of streams as well as predominance of non treated matrix or added layer of slashbusted material. Therefore, at the 5th and 6th field watershed level, cumulative effects of the proposed treatment on additional stream sediment over the no action or background levels would not likely be measurable. There would be no effect on stream temperature as stream shade for non-fish perennial and fish streams would be maintained by the 50 foot buffer.

2. Resource: Fire and Fuels

a. Affected Environment

Hazard is defined as the existence of a fuel complex that constitutes a threat of wild land fire ignitions, unacceptable fire behavior and severity, or suppression difficulty. Fuels include dead and down woody debris, and live vegetation. Dead and downed fuels consist of downed woody material available to support the start and spread of fires and is usually expressed in tons per acre. Live fuels are those fuels that grow vertically. Live fuel densities are usually expressed as crown base height and crown bulk density. Crown base height is the distance between the surface fuels and the bottom level of the tree crowns and is usually expressed in feet. The greater the crown base height, the longer the flame length needed to ignite the crowns. Crown bulk density is the amount of crown fuels within a given area and is usually expressed as pounds of foliage per cubic foot. The greater the crown bulk density the easier for crown fires to propagate. Fire hazard within the proposed units varies based on the age of the stand and past management activities. Stands (> 15 years) that have been thinned or brushed have a higher dead and downed fuel component which will contribute to higher fire intensities and flame lengths. Units proposed for treatment have high live fuel densities that will contribute to active crown fires and high percentages of mortality under high to extreme fire weather conditions.

b. Environmental Consequences

1) Alternative 1: No Action

The wildland fire hazard and hazardous fuel conditions will increase within each unit as the live fuel density increases over time due to the growth of the brush, hardwoods and conifers. Crown bulk densities will increase, thus increasing the risk of stand replacement crown fires under high to extreme fire weather conditions. Increased fire behavior intensities, flame lengths and rates of spread will result from the increased fuel levels. Dead and downed fuels from past management activities will contribute to fire spread, but will decrease over time as fine fuels (<1") begin decomposing and compacting.

2) Alternative 2: Proposed Action

Thinning / brushing of these stands will move the vertical live fuel profile to a horizontal surface fuel reducing the crown bulk density in all units proposed to a level of which crown fire potential is minimized. Crown base height and dead and downed fuel loading will increase. Down and dead fuel loadings will vary based on the age of the stand, spacing requirements and diameter of fuels being thinned / brushed.

Fuel treatment levels will be based on the predicted fuel loading following the thinning/brushing treatment as described in Table 2. Table 2 proposes eight (8) silviculture treatment prescriptions.

Prescription 1 (Table 2) - No fuels treatment. Fuels loadings are expected to be light to moderate. Dead and downed fuels will consist of primarily fine fuels (<1" diameter). Increased fire behavior

intensities, flame lengths and rates of spread will result from the added fuel levels in these units.. Wildfire will result in moderate to high intensity, stand replacement fires that are resistant to control. The immediate increase in fire behavior will continue to exist until the fine fuels have fallen off. The remaining larger fuels (1" - 6") will continue to contribute to increased fire intensities and rates of spread. This increase in hazard will decrease over time depending on the decay rates and compaction of the fuels.

Prescription(s) 2 - 4 (Table 2) - Treatment of <50% of hazard fuels created. Fuel loadings are expected to be moderate to high based on the age of the stands and spacing requirements. Increased fire behavior intensities, flame lengths and rates of spread will result from the added fuel levels. In units without fuels treatments wildfire will result in high intensity, stand replacement fires that are resistant to control. Fuels treatments will reduce up to 50% of hazardous fuels within units to decrease fire behavior to a level that can be suppressed by initial attack resources. Fuels treatments will be focused in areas of the highest fuel loadings, along frequently used roads or trails and in areas of resource concerns. The remaining fuels will add to the increase in fire behavior and will continue to exist until the fine fuels have fallen off.

The remaining larger fuels (1" - 6") will continue to contribute to increased fire intensities and rates of spread. This increase in hazard will decrease over time depending on the decay rates and compaction of the fuels.

Prescription(s) 5 - 7 (Table 2) - Treatment of <100% of hazard fuels created. Fuel loadings are expected to be high based on the age of the stands and spacing requirements. In the untreated units increased fire behavior will result in high intensity, stand replacement fires that are resistant to control. Fuels prescriptions will reduce up to 100% of hazardous fuels decreasing fire behavior to a level that will allow for lower fire intensity, flame length and rate of spread if a wildfire occurs on the site. These changes in fire behavior reduce the resistance to fire control efforts. Fire suppression forces will have more time to detect and respond to a slower moving fire. The potential for effective direct attack on the fire is greater as the fire is less intense, slower moving, and has lower flame lengths. Fire behavior will be reduced to allow intensity ground fire and mortality to existing trees will be minimized.

Units treated with the slashbuster will reduce the vertical live fuel profile to a compact fuel bed, generally less than 8" inches in depth. Fire intensities, flame lengths and rates of spread will be the lowest under these prescriptions. These changes in fire behavior reduce the resistance to fire control efforts. Fire suppression forces will have more time to detect and respond to a slower moving fire. The potential for effective direct attack on the fire is greater as the fire is less intense, slower moving, and has lower flame lengths. Fire behavior will be reduced to a low intensity ground fire and mortality to existing trees will be minimized. Field observations have indicated that slash treated with a slashbuster has higher decomposition rates as compared to manually treated fuels. Fire hazard is expected to decrease more rapidly.

3. Resource: Wildlife

A range of wildlife species utilize the areas proposed for young stand management. The shrubby

vegetation found in young stands is used for foraging and nesting by many songbirds. However, there are no wildlife species considered exclusively dependent on the age classes of the stands being treated. This discussion will focus on potential impacts to T&E, survey and manage species and songbirds.

a. Affected Environment

The areas proposed for young stand management are generally less than 30 years old. Stands less than 30 years old do not provide nesting habitat for spotted owls, marbled murrelets, and bald eagles. Bald eagles and spotted owls may occasionally use young stands for foraging. However, this foraging is most likely associated with edges where adjacent large trees provide perching opportunities and cover.

There are 15 spotted owl cores or activity centers within 1/4 mile of the areas proposed for treatment. There are no known bald eagle or peregrine falcon nests within 1/2 mile of the proposed treatment units. There are no marbled murrelet nests documented on the Medford District BLM. None are known to occur within 1/4 mile of the proposed treatment units.

Survey and manage molluscs with potentially suitable habitat in the project area include *Monadenia chaceana* and *Helminthoglypta hertlieni*. These molluscs are strongly associated with talus and rock outcrops. Coarse woody debris is also an important habitat component for these species.

Red tree voles are associated with mature Douglas-fir stands with high canopy closure (>50%). The young stands proposed for treatment are not suitable red tree vole habitat.

The dense shrubby vegetation associated with young stands provides foraging and nesting habitat for a variety of songbirds. Examples of songbirds that might be found in young stands include spotted towhee, chipping sparrow, and dark-eyed juncos.

b. Environmental Consequences

1) Alternative 1: No Action

Under the No Action Alternative, stands would be left to develop along their current trajectory. This might include increased fuel loads and decreased tree growth rates due to overstocking.

In their current condition, there would be an increased risk of stand destroying fires associated with high fuel loading. As long as fuel levels remain high, the risk of stands being set back to earlier seral stages remains elevated and the ability to effectively manage for mature forests and associated wildlife species is greatly compromised.

As these stands develop, overstocking would result in decreased growth rates for conifers. Stand development would be highly variable. On some sites, conifers may become a less dominant component in the stand. Competition would result in mortality from drought stress, disease and insects.

For spotted owls, bald eagles, marbled murrelets and red-tree voles, the No Action alternative may delay the development of suitable habitat. Fire hazard would be increased and there would be a greater potential for stand replacing fires.

For molluscs, important habitat features such as down logs and rock outcrops remain intact. This enhances the ability of these sites to provide suitable habitat as stands mature. Fire hazard would increase and there would be greater potential for stand replacing fires.

Under the No Action Alternative, habitat for songbirds remains available. Songbirds are associated with a diverse array of habitat conditions for nesting and foraging. Stand development which includes a variety of species and forest conditions is likely to benefit a wide range of songbirds. Songbird species and abundance will fluctuate over time as stand conditions change.

2) Alternative 2: Proposed Action

In general, young stand management results in short term effects associated with disturbance, stand modification and fuel reduction. Long term effects include increased tree growth, shifts in species composition, fuel reduction and decreased mortality associated with overstocking.

Fuel reduction reduces the risk of stand replacement fires and enhances the long term ability of these stands to achieve mature forest conditions. Estimates are that 5-15% of the targeted fuels will not be consumed. This allows for some of the ground cover benefits provided by slash to remain intact.

For spotted owls, bald eagles, marbled murrelets and red-tree voles, young stand management will not impact the suitability of current foraging or nesting habitat. This is based primarily on the fact that young stands do not provide suitable nesting habitat or preferred foraging habitat. These species are associated with mature forests and their use of young stands would be incidental.

However, in the long term, young stand management may benefit spotted owls, bald eagles, marbled murrelets and red-tree voles if it creates better growing conditions for trees. Treatments that reduce the amount of time required to achieve larger diameter trees and provide for mature forests will benefit these species.

Restricting the operation of power equipment within 1/4 mile of spotted owl nest sites or activity centers of all known pairs and resident singles between March 1 - June 15 will minimize potential disturbance.

For songbirds, young stand treatments modify habitat and create disturbance to individuals utilizing the treated sites. While the removal of vegetation may displace foraging and nesting for some individuals, it may improve habitat for others. Songbirds which prefer more open habitats will benefit from young stand management. However, because hardwoods and brush sprout quickly after treatment, the benefits of an open stand will be diminished over time. In the long term, treatments that reduce the amount of time required to achieve larger diameter trees and provide for mature forests will benefit species associated with those habitat types.

For molluscs, important habitat features such as down logs and rock outcrops remain intact. This enhances the ability of these sites to provide suitable habitat as stands mature.

4. Resource: Fisheries

a. Affected Environment

Most of the units proposed for treatment contain Riparian Reserves. Approximately two thirds of the Riparian Reserves that are in the proposed treatment units are associated with intermittent streams which are not used by fish. Approximately one third of the Riparian Reserves contain perennial streams but are not used by fish. Two perennial, cutthroat streams are present within the proposed treatment units. There are eleven units that are between one quarter mile and one mile from coho streams. Many of the intermittent streams in the project area flow only in response to storm events and are dry the rest of the year. As a result, plants which are adapted to moist soil conditions may be present only within a few feet of the stream or not at all. Other intermittent streams and some perennial streams are in deep V-shaped channels with no floodplain, allowing riparian vegetation to grow only within a few feet of the stream. Outside of these narrow zones of riparian plants, the vegetation in the Riparian Reserve is similar to that which is found in the drier upland areas outside of the reserves.

The natural stand condition in the areas outside the immediate riparian zone would be an open overstory and sparse understory dominated by fire-adapted species. Due to past logging practices and the exclusion of fire, forest stands in the project area are typically more dense and brushy than under natural conditions and have a higher fuel loading.

b. Environmental Consequences

1) Alternative 1: No Action

Fuel loading and stand density in the Riparian Reserves will continue to be high, posing a high wildfire hazard. The risk of a stand-destroying fire would remain high in much of the Riparian Reserve acreage, including miles of streams which would be vulnerable to the effects of wildfire outside the normal range of intensity (see Soil and Water effects). Stands with high densities would continue on a slow trajectory towards late-successional forests.

2) Alternative 2: Proposed Action

No adverse effects to fish or aquatic resources are anticipated from the proposed action. The no treatment widths within the riparian reserve for PCT and brushing treatments are 50 feet for perennial and intermittent streams with fish, 50 feet for perennial streams without fish, and 25 feet for intermittent streams without fish. The no treatment width for slashbuster treated areas is 50 feet. The no treatment zones for PCT, brushing and slashbuster on perennial streams and intermittent streams with fish accompanied with the removal of only small diameter trees will prevent a reduction of shade from taking place. Bank stability, nutrient input and cover in the form of overhanging vegetation will not be affected

by the proposed actions. No burning of hand piles will take place within 50 feet of all streams. These no treatment buffers close to streams will be sufficient to protect streams from even the small risk of erosion associated with removal of the organic soil layer under burned hand piles. The spacing of hand piles to be burned outside the no treatment buffers but within the Riparian Reserve is sufficient to minimize the risk of sediment transport. No broadcast burning will take place within the Riparian Reserves.

The PCT, brushing and slashbuster would place the stands on developmental paths so that desired stand characteristics result in the future. The resultant fuel loading and fire hazard will be lower than under the no action alternative. The short and long term effects of the proposed action are beneficial at the site level, as wildfire hazard will be reduced in and around Riparian Reserves. No cumulative effects are anticipated from the proposed action as burning will be widely dispersed spatially at the site and watershed levels. In addition, it is unlikely that all of the proposed burning would take place within the same season, but will instead take place over a 2 to 3 year period.

5. Resource: Botany

a. Affected Environment

The pre-commercial thinning units have very little native habitat remaining due to past timber management practices. The islands of habitat with larger trees and associated mature understory are small and contain the following special status or survey and manage vascular plant species: *Cypripedium fasciculatum*, *C. Montanum*, *Frasera umpquaensis*, and *Bensoniella oregana*. Small buffers (averaging 50') have been established around these populations to protect the immediate micro-site conditions.

The mycorrhizal connections within the units have been disrupted to the point where fungi habitat may be non-existent, but substrate for lichens and bryophytes may still occur on the legacy trees. Fuel loadings from the PCT treatments will be heavy, creating artificial shade and moist conditions at the ground surface adjacent to plant buffers and legacy trees.

b. Environmental Consequences

1) Alternative 1: No Action

Under the No Action alternative, the fuel loadings will increase the wildfire risk for the special status or survey and manage plant species found in these units. Although, moist micro-sites may be provided initially, in the long run the drying of fuels at these sites could lead to catastrophic fire that would eliminate populations and any islands of native habitat that may occur.

2) Alternative 2: Proposed Action

The effects of using a slashbuster machine on native vegetation could be both positive and negative. The

slashbuster debris left after treatment will be smaller in size than other mechanical methods which should reduce the chances of severe fire effects under a wildfire compared to the No Action alternative.

Since slashbuster units are not being planned for burning, the risk of severe fire effects under wildfire circumstances should still be considered, though, because the depth of the debris layer could still be substantial. A thick layer of slashbuster debris under the right moisture conditions could create a high intensity ground fire. Effects from such a fire could include damage to the soil and seed bed to a point where any species in the herbaceous layer may have difficulty re-establishing.

The hand piling and burning of hand piles will greatly reduce the threat of catastrophic fire to the special status or survey and manage plants found in these units. It will also help to protect legacy trees/habitat islands from being eliminated by wildfire. Buffers will provide immediate protection to plant populations which are sensitive to fire and ground disturbance as fuel treatments will allow for reduction in fuel loading adjacent to these buffers.

Since piling and the burning of piles will be kept at least ten (10) feet or more from the boles of 16" DBH or greater trees, (all land allocations) any habitat which may exist for lichens and bryophytes will be protected and the potential for non-vascular plants to re-establish in the future will be maintained.

Chapter 4

Agencies and Persons Consulted

A. Public Involvement

No formal public scoping or involvement was held on this proposed project. Extensive discussions about the Resource area's prescribed burning program have been held with Oregon State Department of Forestry.

B. Availability of Document and Comment Procedures

The EA will be available for a 15 day public review period. Announcement of this period will be made through the publication of a legal notice in the Grants Pass Courier and a mailing to individuals and organizations who have requested to be kept informed of projects such as this. Comments should be sent to the BLM at 3040 Biddle Road, Medford, OR 97504.

Appendix A: Proposed Treatment Units

Table 6: Proposed Treatment Units																			
Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora a lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnot)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
PRECOMMERCIAL THINNING UNITS																			
115114	Release	33S-10W-11-304	LSR	Quail Crk Fire		13	30	8	P	ANV		YES	NO	Wild Rogue - South	Mod.	High	1	1	
110116	Release	33S-10W-15-007	LSR	Upper Quail Creek	3	26	30	8	P	ANV	BEOR	YES	NO	Wild Rogue - South	Low	Mod.	3	1	
111200	Release	33S-10W-14-006	LSR	Lower Quail Creek		21	30	8	P	ANV		YES	NO	Wild Rogue - South	High	High	1	1	
112649	Release	33S-10W-14-003	LSR	Lower Quail Creek		144	30	8	P	ANV		YES	NO	Wild Rogue - South	High	High	1	1	
112650	Release	33S-10W-15-003	LSR	Lower Quail Creek		30	30	8	P	ANV		YES	NO	Wild Rogue - South	Mod.	High	3	1	
112653	Release	33S-10W-15-010	LSR	Upper Quail Creek	1	140	30	8	P	ANV		YES	NO	Wild Rogue - South	Low	High	2	1	
110112	Release	33S-10W-14-007	LSR	Lower Quail Creek		20	30	8	P	ANV		YES	NO	Wild Rogue - South	High	High	1	1	
112654	Release	33S-10W-15-013	LSR	Upper Quail Creek	2	86	30	8	P	ANV		YES	NO	Wild Rogue - South	Mod.	High	3	1	

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Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnote)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
116084	Release	33S-10W-14-011	LSR	Upper & Lower Quail Creek		21	30	8	P	ANV		YES	NO	Wild Rogue - South	High	High	1	1	
112597	Release	33S-09W-20-007	LSR	County Line	6	34	30	5	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	3	2	
116110	Release	33S-09W-29-020	LSR	County Line	6	2	30	0	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	0	
112635	Release	33S-09W-32-002	LSR	Missouri Blowdown	9	5	20	3	--	--		NO	NO	Wild Rogue - South	Mod.	Mod.	2	3	
112676	Release	33S-10W-36-001	LSR	Missouri Basin	1	16	30	7	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	2	
112636	Release	33S-09W-32-006	LSR	Jenny Breaks	4	14	30	4	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	3	3	NSO
112911	Release	34S-09W-06-002	LSR	Bear Camp	4	22	30	5	I	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	3	2	
113015	Release	34S-10W-01-002	LSR	Bear Camp	5	10	40	5	I	ANV		NO	NO	Wild Rogue - South	Low	Mod.	3	2	NSO
112910	Release	34S-09W-05-005	LSR	County Line		12	30	5	I	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	2	
112912	Release	34S-09W-06-010	LSR	County Line	2	16	20	5	I	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	3	2	

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Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnote)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
110793	Release	34S-09W-06-005	LSR	Bear Camp		24	30	5	I	ANV		NO	NO	Wild Rogue - South	Low	Mod.	3	2	
110798	Release	34S-09W-06-011	LSR	Nfk Windy Cr	3	40	30	5	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	2	
110997	Release	34S-10W-01-004	LSR	Bear Camp Spur	3	15	30	5	I	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	2	
110796	Release	34S-09W-06-008	LSR	Big Windy		10	30	5	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	3	2	
111001	Release	34S-10W-01-008	LSR	Big Windy		5	30	5	P	ANV		NO	NO	Wild Rogue - South	Low	Mod.	3	2	
111009	Release	34S-10W-12-009	LSR	Bear Camp Spur	3	11	30	5	I	ANV		NO	NO	Wild Rogue - South	Low	Mod.	3	2	
113019	Release	34S-10W-12-010	LSR	Bear Camp Spur	2	9	30	5	I	ANV		NO	NO	Wild Rogue - South	Low	Mod.	3	2	
113018	Release	34S-10W-12-001	LSR	Big Windy		10	30	5	P	ANV		NO	NO	Wild Rogue - South	Low	Mod.	3	2	
112918	Release	34S-09W-07-004	LSR	Big Windy		33	30	5	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	2	
112920	Release	34S-09W-07-007	LSR	NFk Windy Cr	1	15	30	5	--	--		NO	NO	Wild Rogue - South	Mod.	Mod.	2	2	

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Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnote)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
112919	Release	34S-09W-07-006	LSR	NFk Windy Cr	1	22	30	7	--	--		NO	NO	Wild Rogue - South	Mod.	Mod.	2	2	
114972	Release	34S-08W-11-011	LSR	Rum Creek BO	10-2	14	10	0	--	ANV		YES	NO	Wild Rogue - South	Low	Mod.	3	0	
113825	Release	34S-07W-07-007	LSR	Centennial Ridge	7-2C	45	10	1	P	ANV		NO	NO	Rogue - Recreation	Mod.	Mod.	2	4	NSO
112933	Release	34S-09W-08-015	LSR	Myrne Return	7A	26	20	8	--	--		NO	NO	Wild Rogue - South	Mod.	Mod.	2	1	
112932	Release	34S-09W-08-013	LSR	Myrne Return	7-B	5	20	8	--	--		NO	NO	Wild Rogue - South	Mod.	Mod.	2	1	
112948	Release	34S-09W-17-006	LSR	Myrne Return	7-B	60	20	8	I	ANV		NO	NO	Wild Rogue - South	Low	High	2	1	
112947	Release	34S-09W-17-004	LSR	Myrne Return	7A	6	20	8	I	ANV		NO	NO	Wild Rogue - South	Low	High	2	1	
110897	Release	34S-09W-17-019	LSR	Myrne Return	7-B	6	20	8	I	ANV		NO	NO	Wild Rogue - South	Low	High	1	1	
112969	Release	34S-09W-18-014	LSR	Myrne Return	7-B	30	20	8	I	ANV		PRR	NO	Wild Rogue - South	Mod.	Mod.	2	1	
112944	Release	34S-09W-16-018	LSR	Myrne Return	3	20	10	5	I	ANV		NO	NO	Wild Rogue - South	Low	Mod.	3	2	

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Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora a lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnote)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
112945	Release	34S-09W-16-012	LSR	Myrne Return	3	9	10	0	I	ANV		NO	NO	Wild Rogue - South	Low	Mod.	3	2	
112974	Release	34S-09W-21-007	LSR	Myrne Return	3	36	10	5	I	ANV		NO	NO	Wild Rogue - South	Mod.	High	1	2	
116138	Release	34S-09W-21-010	LSR	Myrne Return	3	2	10	5	I	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	2	
112874	Release	34S-08W-22-024	LSR	West Rum Creek	4	12	20	7	I	ANV		NO	NO	Rogue - Recreation	Mod.	Mod.	2	2	
113025	Release	35S-05W-11-004	SGFMA	Elk Mtn	11-1F	18	20	4	I	ANV		NO	NO	Jumpoff Joe	Mod.	Mod.	1	3	<50% acres w/group (see fuel mitigat. map)
113024	Release	35S-05W-11-003	SGFMA	Elk Mtn	2	14	20	4	I	ANV		NO	NO	Jumpoff Joe	Mod.	Mod.	1	3	<50% acres w/group (see fuel mitigat. map)
112578	Release	35S-05W-11-006	SGFMA	Elk Mtn	4	16	20	4	I	ANV		NO	NO	Jumpoff Joe	Mod.	Mod.	1	3	<50% acres w/group (see fuel mitigat. map)
113914	Release	35S-05W-11-011	SGFMA	Elk Mtn	11-1B	6	20	4	I	ANV		NO	NO	Jumpoff Joe	Mod.	Mod.	1	3	<50% acres w/group (see fuel mitigat. map)
113812	Release	35S-09W-15-014	LSR	Silver Spur	14	15	30	6	I	ANV		YES	NO	Silver Creek	High	High	1	2	
116026	Release	35S-09W-15-016	LSR	Silver Spur	17	2	10	4	I	ANV		YES	NO	Silver Creek	High	High	1	3	
113814	Release	35S-09W-23-005	NGFMA	Silver Spur	17	13	10	4	--	ANV		YES	YES	Silver Creek	High	High	1	3	

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnote)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
115151	Release	35S-09W-21-002	NGFMA	Hawk Creek		45	40	5	P	ANV		YES	NO	Silver Creek	High	High	1	2	
113815	Release	35S-09W-21-005	NGFMA	Silver Spur	22	14	20	3	P	ANV		YES	NO	Silver Creek	High	High	1	3	
157911	Release	37S-04W-07-007	SGFMA	Upper Savage	7-4	12	20	4	I	ANV		NO	NO	Rogue - Grants Pass	Mod.	High	1	3	
157912	Release	37S-04W-07-008	SGFMA	Savage Fire	7	18	10	4	I	ANV	CYFA	NO	NO	Rogue - Grants Pass	Mod.	High	1	3	
157909	Release	37S-04W-07-005	SGFMA	Upper Savage	7-3	15	10	4	--	ANV		NO	NO	Rogue - Grants Pass	Mod.	High	1	3	
157914	Release	37S-04W-07-010	SGFMA	Savage Fire	7-17B	36	10	4	--	ANV		NO	NO	Rogue - Grants Pass	Mod.	High	1	3	
157917	Release	37S-04W-07-013	SGFMA	Savage Fire	7-20	7	10	4	I	ANV		NO	NO	Rogue - Grants Pass	Mod.	High	1	3	
157910	Release	37S-04W-07-006	SGFMA	Savage Fire	463	11	10	4	I	ANV		NO	NO	Rogue - Grants Pass	Mod.	High	1	3	
157916	Release	37S-04W-07-012	SGFMA	Savage Fire	7-17A	9	20	3	--	ANV		NO	NO	Rogue - Grants Pass	Mod.	High	2	3	
157922	Release	37S-04W-07-018	SGFMA	Upper Savage	7-12	34	10	4	I	ANV		NO	NO	Rogue - Grants Pass	Mod.	High	1	3	
157927	Release	37S-04W-07-023	SGFMA	Upper Savage	7-16	11	20	4	--	ANV		NO	NO	Rogue - Grants Pass	Low	High	2	3	
157926	Release	37S-04W-07-022	SGFMA	Upper Savage		4	20	4	--	ANV		NO	NO	Rogue - Grants Pass	Mod.	High	1	3	
158162	Release	37S-04W-17-011	AMA	Birdseye Fire	17-3	8	10	4	--	ANV		NO	NO	Lower Applegate River	Mod.	High	1	3	

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnote)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
158164	Release	37S-04W-17-013	AMA	Birdseye West	17-5	13	10	4	--	ANV		NO	NO	Lower Applegate River	Mod.	High	1	3	
157718	Release	37S-04W-18-017	AMA	Upper Savage	18-14	4	10	4	I	ANV		NO	NO	Lower Applegate River	High	High	1	3	NSO
157719	Release	37S-04W-18-018	AMA	Upper Savage	18-8	24	20	4	I	ANV		NO	NO	Lower Applegate River	Mod.	High	1	3	NSO
124232	Release	37S-04W-20-007	AMA	Birdseye Fire	17-5	2	10	4	--	--		NO	NO	Lower Applegate River	Mod.	High	1	3	
113189	Release	37S-07W-27-009	LSR	Quarter Moon	27-5	63	160	2	I	ANV		NO	NO	Deer Creek	High	High	1	3	
113200	Release	37S-07W-35-012	LSR	Tall Timber	35-1	49	20	8	I	ANV		NO	NO	Deer Creek	Mod.	High	2	4	silvi rx: 60% #8-40% #4
113295	Release	38S-07W-01-009	LSR	Spider Hill		12	170	4	I	ANV		NO	NO	Deer Creek	Mod.	Mod.	3	3	
113294	Release	38S-07W-01-008	LSR	Spider Hill		9	170	4	I	ANV		NO	NO	Deer Creek	Mod.	Mod.	3	3	
111586	Release	38S-07W-03-005	SGFMA	Derry Trespass		5	30	2	--	--		NO	NO	Deer Creek	Mod.	High	1	3	
115944	Release	38S-05W-06-011	AMR	Chrome Dome	7-4	3	10	1	--	--		NO	NO	Lower Applegate	Mod.	High	1		
113767	Release	38S-05W-07-012	AMR	Chrome Dome	7-4	55	10	1	I	ANV		NO	NO	Lower Applegate River	Low	High	2	3	NSO
113759	Release	38S-07W-11-006	SGFMA	Tall Timber	11-2	49	10	8 / 4	I	ANV		NO	NO	Deer Creek	High	High	1	1	NSO RX: 70% #8 / 30% #4

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora a lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnot)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
115053	Release	38S-06W-14-017	AMR	Spencer's Hole	14-1	22	10	1	I	ANV		NO	NO	Murphy	Mod.	High	2	3	
113257	Release	38S-06W-14-021	AMR	Murphy's Wallow	7	12	20	1	--	ANV		NO	NO	Lower Applegate River	Mod.	Mod.	2	3	
113260	Release	38S-06W-15-014	AMR	Spencer's Hole	15-12	24	10	1	I	ANV		YES	NO	Lower Applegate River	Mod.	High	3	3	
115731	Release	38S-06W-15-018	AMR	Spencer's Hole	15-9	14	10	1	I	ANV		YES	NO	Lower Applegate River	Low	High	3	3	
116178	Release	38S-07W-21-016	SGFMA	Tall Timber	21-7	7	10	1	--	ANV		NO	NO	Deer Creek	High	High	1	4	
116183	Release	38S-06W-23-012	AMR	3Wildeer Ridge	23-1	26	40	2	--	--		YES	NO	Williams	Low	Mod.	3	3	
116184	Release	38S-06W-26-008	AMR	Wildeer Ridge	23-1	2	40	2	--	--		YES	NO	Williams	High	Mod.	1	3	
113273	Release	38S-06W-26-002	AMR	Two T's	35-2	15	10	1	I	ANV		YES	NO	Williams	High	Low	3	4	NSO
113285	Release	38S-06W-35-002	AMR	Two T's	35-2	9	10	1	I	ANV		YES	NO	Williams	High	Mod.	1	3	NSO
113447	Release	39S-06W-09-002	LSR	Deer Cr _#1		23	30	6	P	PV		YES	NO	Deer Creek	Mod.	High	1	2	<50% acres w/group (see fuel mitigat. map)
112020	Release	39S-07W-11-001	SGFMA	Little Grayback	2	27	30	2	--	ANV		NO	NO	Sucker Creek	Mod.	Mod.	2	3	
113460	Release	39S-06W-12-009	AMR	Cedar Wallow	12-2A	32	10	0	--	--		YES	YES	Williams	High	Mod.	1	3	

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnot)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
111902	Release	39S-06W-09-006	LSR	Unknown		39	30	6	I	ANV		YES	NO	Deer Creek	Mod.	High	1	2	<50% acres w/group (see fuel mitigat. map)
111901	Release	39S-06W-09-004	LSR	Unknown 1960's		29	40	6	--	ANV		YES	NO	Deer Creek	Mod.	High	1	2	<50% acres w/group (see fuel mitigat. map)
113462	Release	39S-06W-12-011	AMR	Cedar Wallow	12-7B1	37	20	1	I	ANV		YES	YES	Williams	High	Mod.	1	3	
113450	Release	39S-06W-09-009	LSR	Unknown		14	30	6	--	--		YES	NO	Deer Creek	Mod.	High	1	2	<50% acres w/group (see fuel mitigat. map)
112025	Release	39S-07W-11-006	SGFMA	Little Grayback	1	24	30	1	I	ANV		NO	NO	Sucker Creek	Mod.	Mod.	3	4	
114889	Release	39S-07W-07-006	SGFMA	Robman	7-3A	23	10	1	I	ANV		NO	NO	East Fork Illinois	Mod.	Low	3	4	
115007	Release	39S-08W-13-009	SGFMA	Robman	13-2A	21	10	1	--	ANV		NO	NO	East Fork Illinois	Mod.	Low	3	4	NSO
112112	Release	39S-08W-13-001	SGFMA	Robman	13-1	36	10	1	I	ANV		NO	NO	East Fork Illinois	Mod.	Low	3	4	
115992	Release	39S-07W-18-003	SGFMA	Robman	7-3 A&B	4	10	1	--	--		NO	NO	East Fork Illinois	Mod.	Low	3	4	
113534	Release	39S-07W-17-007	SGFMA	Bear Grapes	17-2	22	130	1	I	ANV		YES	NO	East Fork Illinois	Mod.	Mod.	3	4	
113477	Release	39S-06W-25-003	AMR	Low Divide East	1	17	30	8	P	ANV		YES	YES	Williams	High	Mod.	1	0	
113487	Release	39S-06W-25-020	AMR	Low Quotient	25-2	30	20	2	I	ANV		YES	YES	Williams	High	Mod.	1	3	
112322	Release	39S-05W-25-004	AMA	Thompson Creek	12	28	10	8	--	ANV		YES	NO	Williams	High	Mod.	1	4	

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora a lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnot)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
113484	Release	39S-06W-25-017	AMR	Low Quotient	25-6A	19	10	4	P	ANV		YES	YES	Williams	High	Mod.	1	3	
113485	Release	39S-06W-25-018	AMR	Low Quotient	25-6B	18	20	4	P	ANV		YES	YES	Williams	High	Mod.	1	4	
113543	Release	39S-07W-26-004	SGFMA	Urn Aim	26-5	26	10	1	I	ANV		NO	NO	Deer Creek	Mod.	High	2	4	
113575	Release	40S-07W-01-009	SGFMA	Sucker Crk Salvage		15	30	2	P	ANV		YES	NO	Sucker Creek	Mod.	High	3	3	
113587	Release	40S-07W-14-003	SGFMA	Demo Tarter	11-1A	7	20	4	I	ANV		NO	NO	Althouse Creek	Mod.	Mod.	3	3	NSO
Total Release/Pct Acres						2315													
Brushing Units																			
113884	Brush	40S-07W-13-005	SGFMA	Marys Load	11	8	10	B	--	ANV		YES	YES	Sucker Creek	Mod.	Mod.	3	0	
116087	Brush	33S-10W-24-011	LSR	Long Missouri B/O	26-12	3	10	B	--	--		YES	NO	Wild Rogue - South	High	Mod.	2	0	
116388	Brush	33S-10W-23-019	LSR	Long Missouri B/O	26-12	4	10	B	--	--		YES	NO	Wild Rogue - South	Mod.	Mod.	2	0	
116383	Brush	33S-10W-25-020	LSR	Long Missouri B/O	26-12	3	10	B	--	--		YES	NO	Wild Rogue - South	Low	Mod.	3	0	
115819	Brush	33S-09W-28-010	LSR	Jenny Belly	28-3	42	10	B	P	ANV		NO	NO	Wild Rogue - South	High	Mod.	2	0	
115818	Brush	33S-09W-28-009	LSR	Jenny Belly	28-1	35	10	B	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	0	

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnote)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
115820	Brush	33S-09W-28-011	LSR	Jenny Belly	28-2	42	10	B	P	ANV		YES	NO	Wild Rogue - South	Mod.	Mod.	2	0	
116642	Brush	34S-09W-06-017	LSR	Big Winds	6-1	18	5	B	I	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	0	
116645	Brush	34S-09W-05-015	LSR	Big Winds	5-1	30	5	B	P	ANV		YES	NO	Wild Rogue - South	High	Mod.	3	0	NSO
115793	Brush	34S-09W-08-017	LSR	Big Winds	5-1	17	5	B	P	ANV		YES	NO	Wild Rogue - South	Mod.	Mod.	2	0	
116595	Brush	34S-09W-07-026	LSR	NFk Windy Crk	2	9	10	B	I	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	0	
112863	Brush	34S-08W-22-006	LSR	LSR Smith Cr		11	10	B	--	--		NO	NO	Wild Rogue - South	Mod.	Mod.	2	0	
115742	Brush	34S-08W-10-018	LSR	Rum Creek Buyout	10-1	16	10	B	I	ANV		YES	YES	Wild Rogue - South	Low	Low	3	0	
116647	Brush	34S-09W-08-020	LSR	Big Winds	8-2	15	5	B	P	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	0	NSO
110825	Brush	34S-09W-08-012	LSR	Big Winds	8-2	21	5	B	--	--		NO	NO	Wild Rogue - South	Mod.	Mod.	2	0	NSO <33%acres/year (see fuel mitigat. map)
115741	Brush	34S-08W-10-020	LSR	Rum Creek Buyout	10-5	14	10	B	I	ANV		YES	NO	Wild Rogue - South	Mod.	Low	2	0	

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora a lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnot)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
116644	Brush	34S-09W-07-028	LSR	Big Winds	7-1	21	5	B	P	ANV		YES	NO	Wild Rogue - South	Mod.	Mod.	2	0	
116641	Brush	34S-09W-09-006	LSR	Big Winds	9-1	23	5	B	--	--		NO	NO	Wild Rogue - South	Mod.	Mod.	3	0	
112845	Brush	34S-08W-15-026	LSR	Old Rum	1	8	10	B	I	ANV		YES	NO	Rogue - Recreation	Mod.	High	1	0	
112941	Brush	34S-09W-16-015	LSR	Myrne Return	4A	12	130	B	I	ANV		NO	NO	Wild Rogue - South	Mod.	Mod.	2	0	
112975	Brush	34S-09W-21-008	LSR	Myrne Return	3A	16	140	B	I	ANV		NO	NO	Wild Rogue - South	Mod.	High	1	0	
110624	Brush	34S-08W-22-001	LSR	Smoked Elk	22-2	25	10	B	I	ANV		NO	NO	Rogue - Recreation	Mod.	Mod.	2	0	NSO
115966	Brush	34S-08W-23-005	LSR	Smoked Elk	23-1	40	10	B	--	ANV		YES	NO	Rogue - Recreation	Mod.	Mod.	2	0	NSO
114520	Brush	34S-05W-21-006	SGFMA	Roberts Mtn	21-3A	31	10	B	--	ANV		NO	NO	Jumpoff Joe Creek	Mod.	Mod.	1	4	adjacent/fuels unit
114982	Brush	34S-06W-23-006	SGFMA	Burgess Gulch	23-1C	25	10	B	I	ANV		NO	NO	Jumpoff Joe Creek	Mod.	High	1	4	adjacent/fuels unit
113920	Brush	35S-05W-11-001	SGFMA	Elk Mtn	11-1B	12	20	B	I	ANV		NO	NO	Jumpoff Joe Creek	Mod.	Mod.	1	4	<50% acres w/group (see fuel mitigat. map)
113918	Brush	35S-05W-11-026	SGFMA	Elk Mtn	11-1E	19	10	B	I	ANV		NO	NO	Jumpoff Joe Creek	Low	Mod.	1	4	NSO <50% acres w/group (see fuel mitigat. map)

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora a lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/ No fish (See footnot)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
113903	Brush	35S-05W-11-013	SGFMA	Elk Mtn	1	17	170	B	--	--		NO	NO	Jumpoff Joe Creek	Low	Mod.	1	4	<50% acres w/group (see fuel mitigat. map)
115795	Brush	35S-05W-21-008	SGFMA	Phantom	21-2	13	10	B	I	ANV		NO	NO	Jumpoff Joe Creek	Mod.	High	1	4	
116455	Brush	37S-05W-13-013	AMA	Savage Pass	13-1	2	10	B	--	ANV		NO	NO	Lower Applegate	Mod.	High	1	4	
115972	Brush	37S-05W-13-012	AMA	Savage Pass	13-1	21	10	B	I	ANV		NO	NO	Lower Applegate	Mod.	High	1	4	
114247	Brush	37S-08W-25-001	AMA/S GFMA	Anderson Creek	25-3	12	5	B	I	ANV		NO	NO	Deer Creek	Mod.	Mod.	3	0	
113772	Brush	38S-07W-03-007	SGFMA	Crooked Cedar	3-1A	19	10	B	P	ANV		NO	NO	Deer Creek	High	High	1	0	adjacent/fuels unit
115772	Brush	38S-07W-13-010	LSR	Dry White	13-1	30	10	B	I	ANV		NO	NO	Deer Creek	High	High	1	0	
116187	Brush	38S-06W-22-014	LSR	Wildeer Ridge	27-1	7	10	B	I	ANV		YES	NO	Deer Creek	Mod.	High	1	4	
116192	Brush	38S-06W-27-011	LSR	Wildeer Ridge	27-1	33	10	B	I	ANV		YES	NO	Deer Creek	Mod.	High	2	4	
116304	Brush	38S-07W-33-005	SGFMA	Bare Nelson	33-1	16	10	B	--	ANV		NO	NO	Deer Creek	High	High	1	0	NSO
115474	Brush	38S-07W-35-019	SGFMA	Jay Root B/O	3	10	10	B	P	PNV		NO	NO	Deer Creek	Mod.	High	1	0	NSO
115470	Brush	38S-07W-35-015	SGFMA	Jay Root	1	26	10	B	--	ANV		NO	NO	Deer Creek	Mod.	High	1	0	
113568	Brush	39S-08W-01-009	SGFMA	Lucky Pot	4	29	10	B	I	ANV		NO	NO	Illinois River/Josephine Creek	Low	High	2	0	

Table 6: Proposed Treatment Units

Unit information & Proposed Silvicultural Treatment									Riparian and S&M plants			POC & <i>Phytophthora lateralis</i>		5 th field Watershed	Fuel Hazard Rating & Fuels Prescription (Pre-treatment) Proposed Fuels Treatment				Comments
Key #	Proposed Silv. Treat.	T-R-Sec. OI Unit #	Primary Land Alloc.	Unit Name	Unit #	Unit Acres	Stand Age (Decade)	Silv. Rx # (See footnotes)	Ripar. Desig. P/I/X (See footnote)	Fish/No fish (See footnote)	Known Botany S & M species (see footnote)	POC Present in Unit	P. lat. in Unit		Hazard Rating	Risk Rating	Fuels Priority to Treat	Fuels Rx# (See footnotes)	
116559	Brush	39S-07W-03-025	SGFMA	Barre Nelson	3-5	13	10	B	--	--		NO	NO	Deer Creek	Mod.	High	2	0	
115854	Brush	39S-06W-09-010	LSR	Howcome Peak	9-1	28	10	B	I	ANV		YES	NO	Deer Creek	Mod.	High	1	0	<50% acres w/group (see fuel mitigat. map)
112011	Brush	39S-07W-09-011	SGFMA	Bear Grapes Test	2	20	10	B	--	--		YES	NO	Deer Creek	Mod.	Mod.	3	0	
115850	Brush	39S-06W-09-014	LSR	Howcome Peak	9-7A	16	10	B	P	ANV		YES	NO	Deer Creek	Mod.	High	1	0	<50% acres w/group (see fuel mitigat. map)
111903	Brush	39S-06W-09-007	LSR	Howcome Peak	9-7B	23	10	B	--	--		YES	NO	Deer Creek	Mod.	High	1	0	<50% acres w/group (see fuel mitigat. map)
116226	Brush	39S-06W-24-006	AMR	South Williams	24-1	26	10	B	I	ANV		YES	YES	Williams Creek	High	Low	3	4	
113549	Brush	39S-07W-27-009	SGFMA	Robman	27-1B	31	10	B	P	ANV		NO	NO	Sucker Creek	Mod.	High	2	0	
Total Brushing Acres						912													

Footnotes:

Precommercial Thinning Silv. Prescription from Table 1 of EA - One of eight (8) potential silvicultural treatments prescribed for units. Brushing Prescription from p. 4 of the EA.

Riparian Designation - P = Perennial with fish and Perennial without fish. I = Intermittent no fish -- = No streams

Fish/No Fish - Absence Not Verified - (ANV) - Streams with fish

- Presence Not Verified - (PNV) - Streams without fish

Fuels Hazard - Completed by Fuels personnel using information on fire hazard from Watershed Analysis work.

Fuels Risk - Completed by Fuels personnel using information on fire risk from Watershed Analysis work.

Fuels Priority - Based on Hazard, Risk, Value and proximity to communities at risk.

Fuels Prescription - Taken from Table 3 in EA. 1 = Slashbuster; 2 = Piling up to 100% of unit; 3 = Piling up to 50% of unit; 4 = No fuel reduction method planned.

Fuels Remarks - Areas where units to be treated are in close proximity and the extent of annual treatments should be limited. See Fuel mitigation map #1.

NSO - Northern Spotted Owl seasonal operating restriction applies.

GPRA
All Units

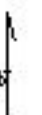
Brushing / PCT / Fuels

-  GPRA boundary
-  Main roads
-  Land Lines
-  Fuels Treatment
-  Brushing_02.shp
-  PCT '02
-  LSR_s
-  LSR_n

0 1 2 Miles

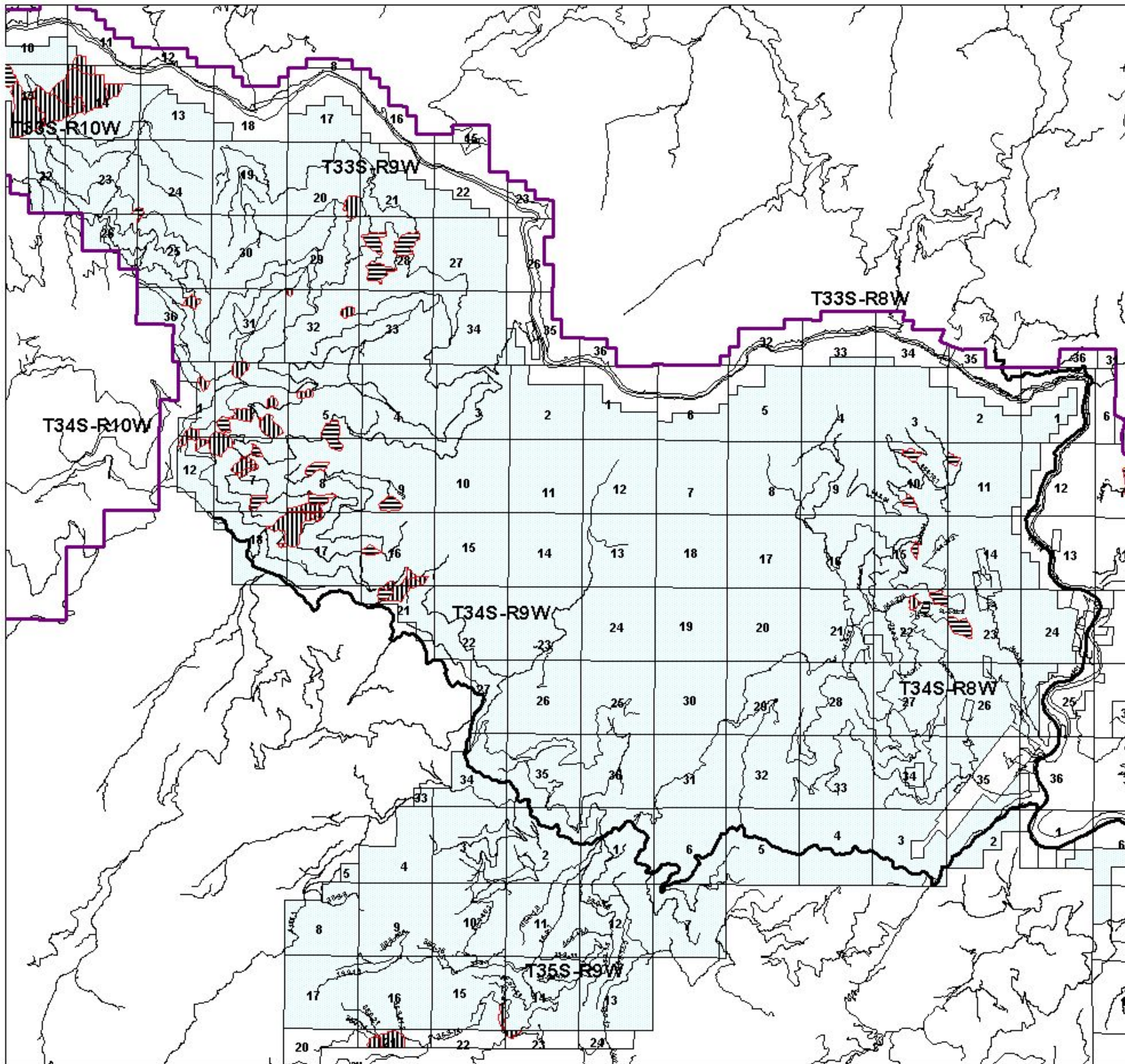
1" = 2.0 miles

utm 10



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T 33,34,35 S
R 8,9,10 W

Brushing / PCT / Fuels

- GPR boundary
- Main roads
- Land Lines
- Field Treatment
- Brushing_02.slp
- PCT '02
- Gravel Trans. Network
- LSR_1

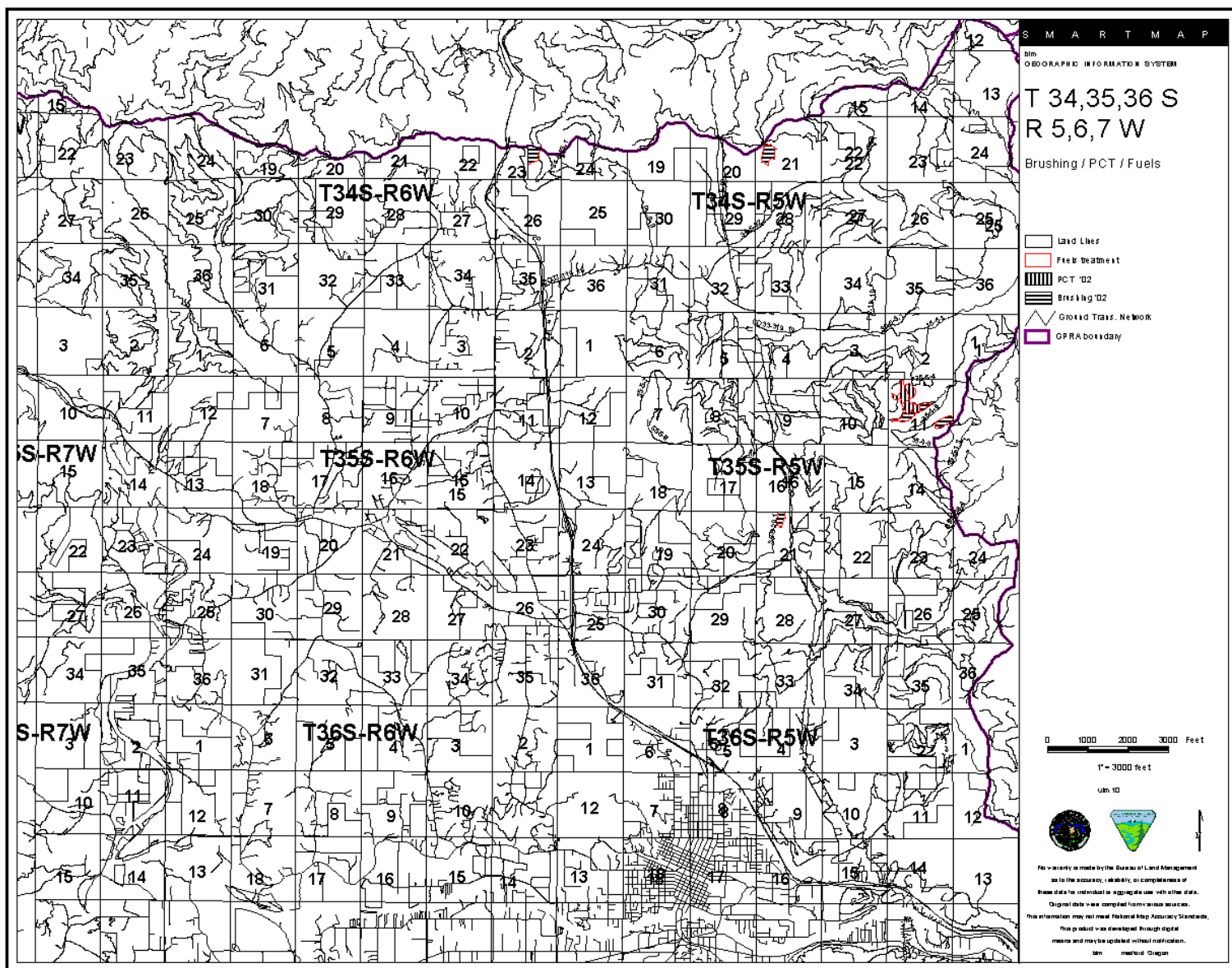
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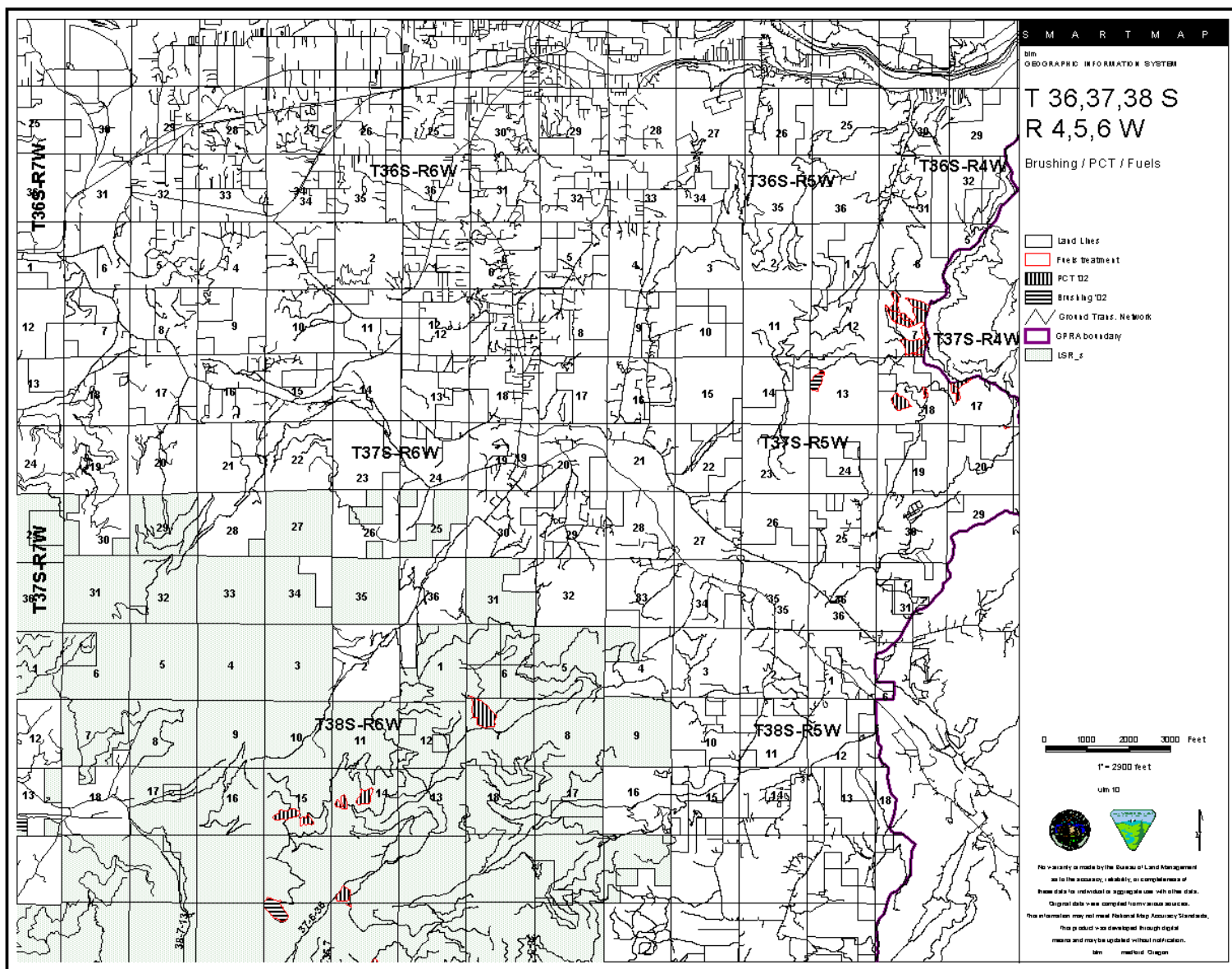
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utm 10

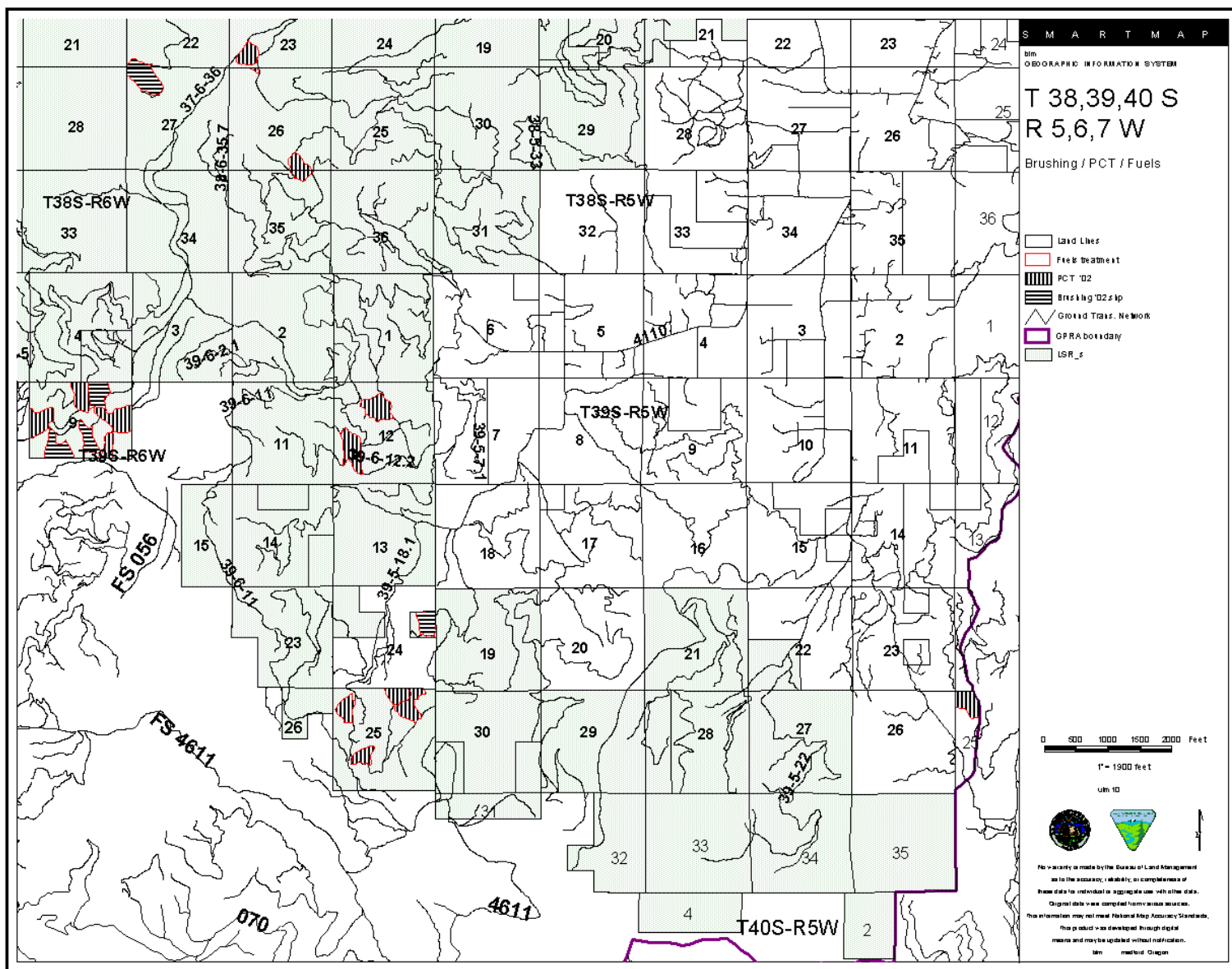


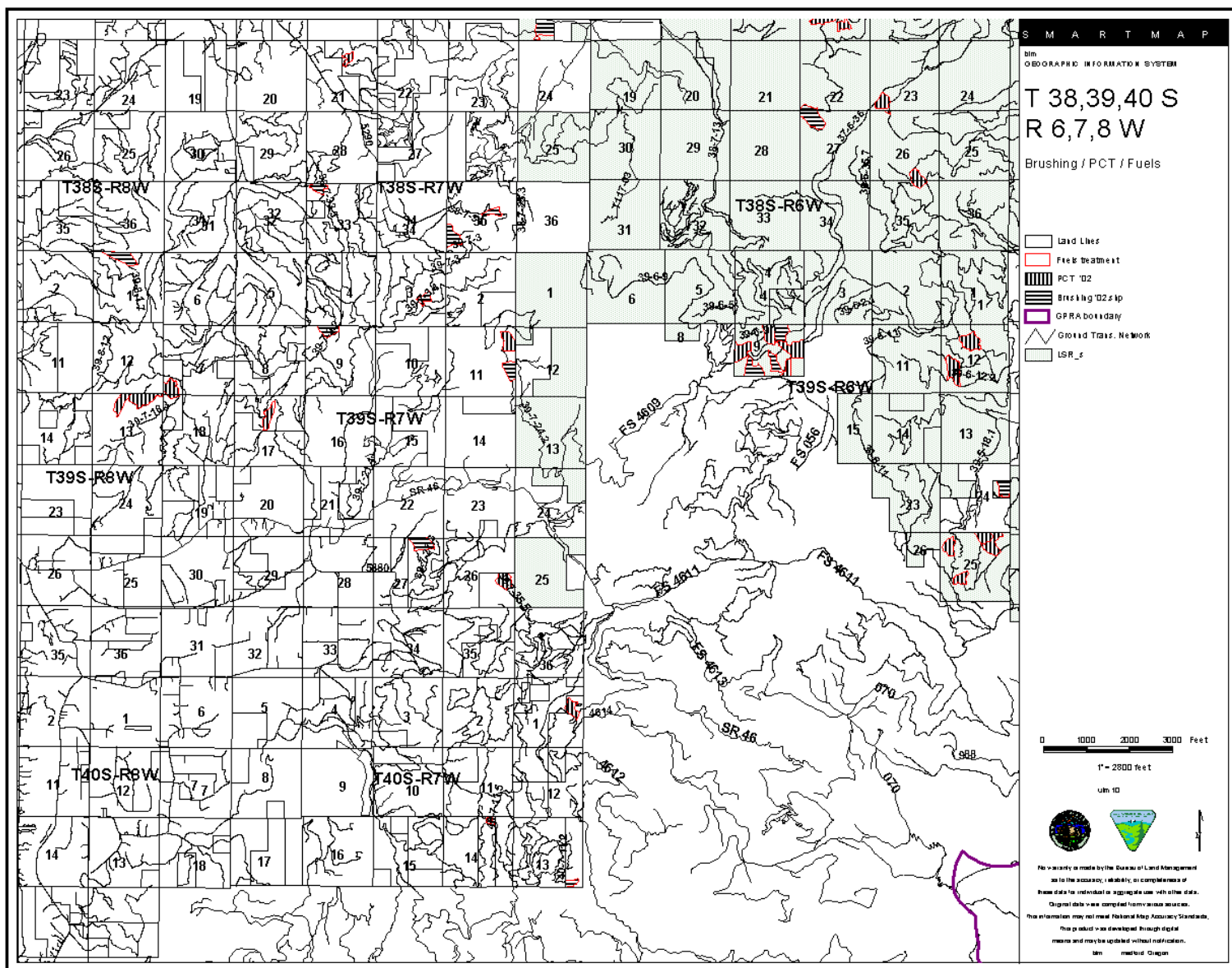
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blm medford Oregon



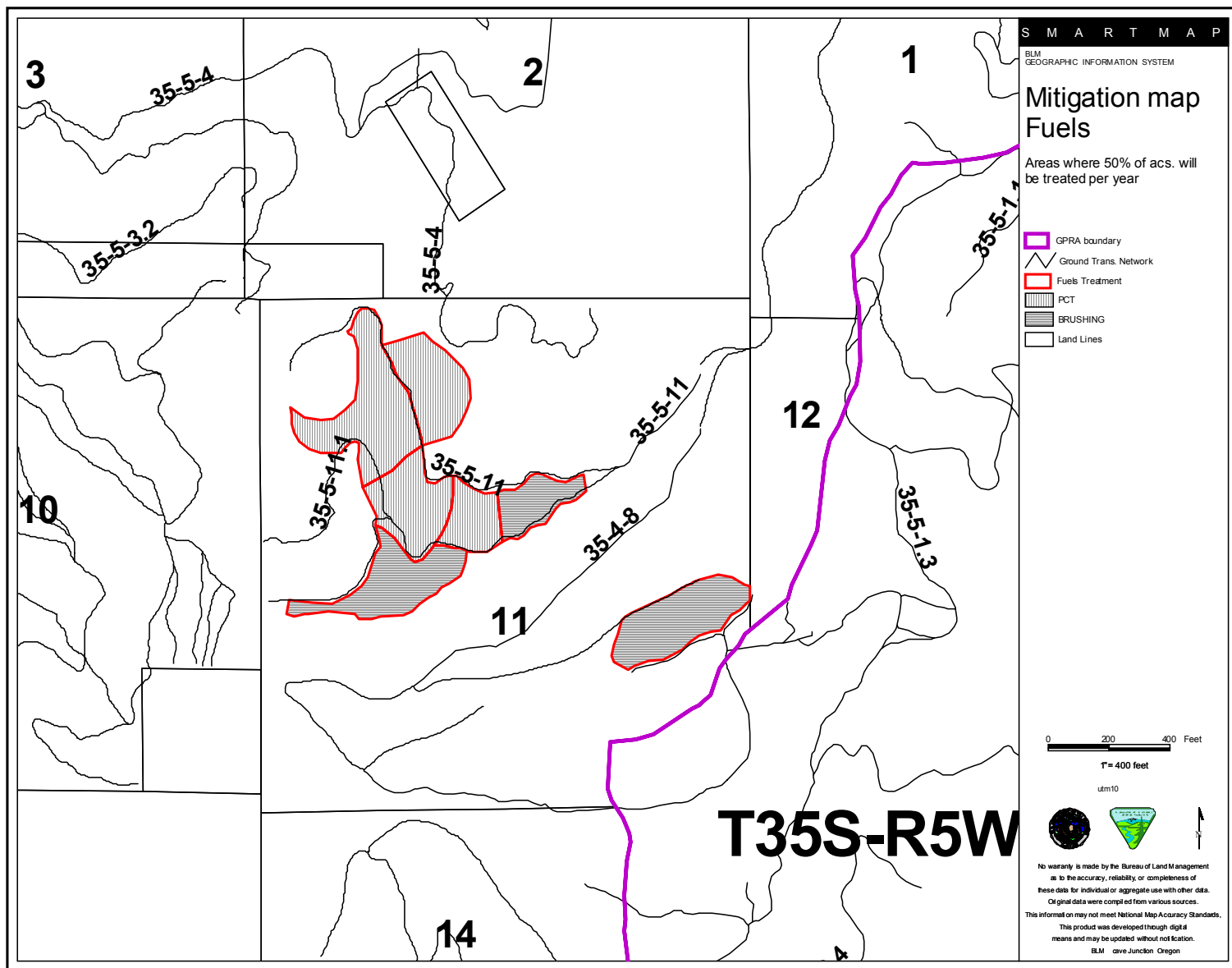


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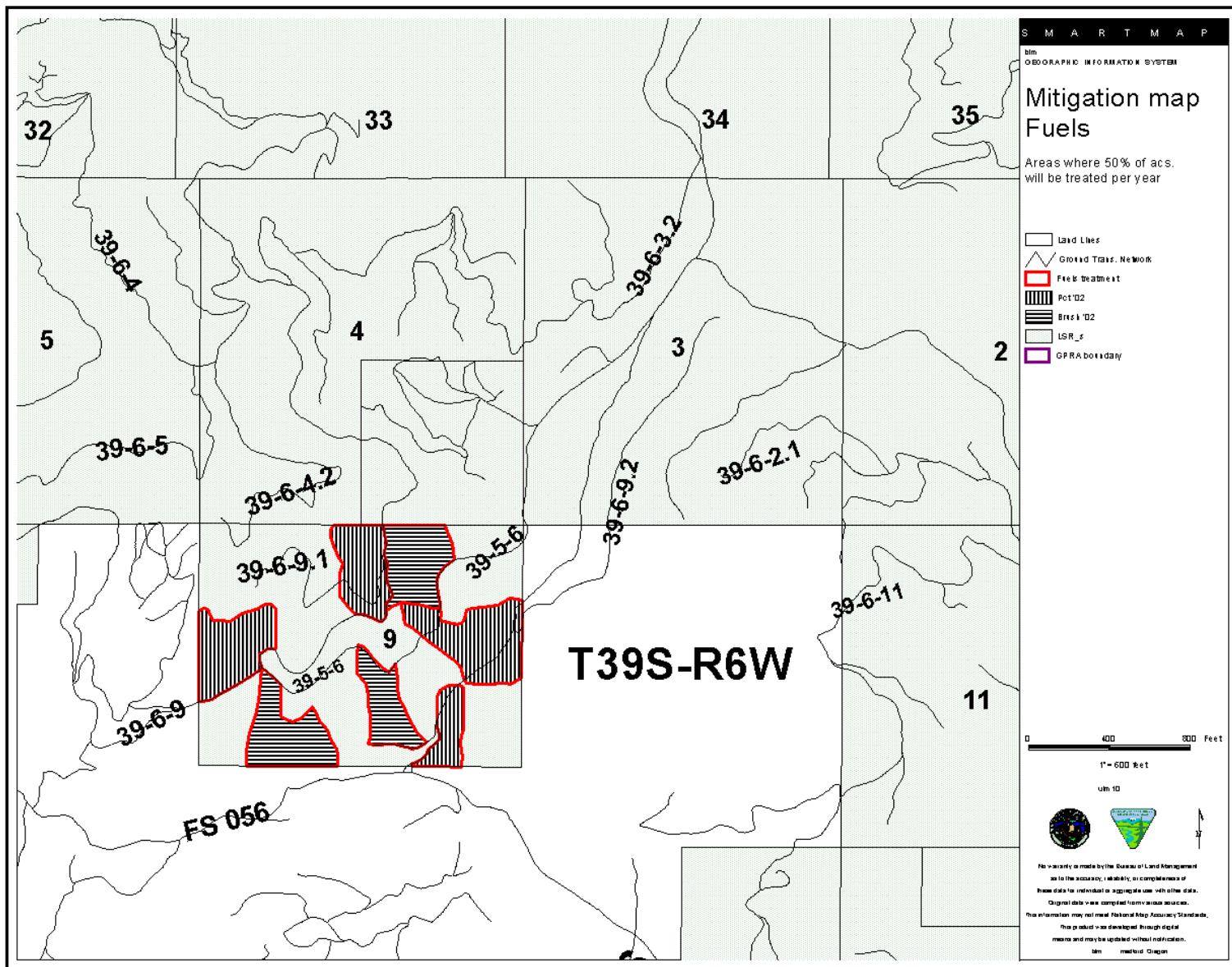




Plot date: Mar 19, 2002; dms



Plot date: Mar 18, 2002; drau



P01date: Mar 19, 2002, dcm